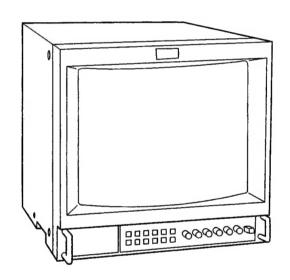
SERVICE MANUAL

MODEL	DEST.	CHASSIS NO.	MODEL	DEST.	CHASSIS NO.
PVM-14M2U	US Canadian US	SCC-G61J-A	PVM-14M4E	AEP	SCC-G62F-A
PVM-14M4U	Canadian	SCC-G61G-A	PVM-14M2A	Australian	SCC-N17A-A
PVM-14M2E	AEP	SCC-G62HA	PVM-14M4A	Australian	SCC-N17B-A





TrinitronPVM-14M2U/14M2E

TRINITRON® COLOR VIDEO MONITOR

SONY

SPECIFICATIONS

Video signal

For PVM-14M4U/14M4E/20M4U/20M4E:

Color system

NTSC, PAL, SECAM, NTSC4.43

Resolution

800 TV lines Aperture correction 0 dB to +6 dB

Frequency response

LINE

10 MHz ± 3 dB (Y signal)

RGB

 $10 \text{ MHz} \pm 3 \text{ dB}$

Synchronization

AFC time constant 1.0 msec.

Color system

For PVM-14M2U/14M2E/20M2U/20M2E:

NTSC, PAL, SECAM, NTSC4.43

Resolution

600 TV lines Aperture correction 0 dB to +6 dB

Frequency response

LINE

 $10 \text{ MHz} \pm 3 \text{ dB (Y signal)}$

RGB

 $10 \text{ MHz} \pm 3 \text{ dB}$

Synchronization

AFC time constant 1.0 msec.

Picture performance

For PVM-14M4U/14M4E/14M2U/14M2E:

Normal scan

7 % over scan of CRT effective screen

area

Under scan

5 % underscan of CRT effective screen

area

H. linearity

Less than 4.0 % (typical)

V. linearity

Less than 4.0 % (typical)

Convergence

Central area:

0.4 mm (typical)

Peripheral area: 0.5 mm (typical)

Raster size stability H: 1.0%, V: 1.5%

High voltage regulation

3.5 %

Color temperature

D65/D93, selectable

USER (3,200K-10,000K, factory

setting is D65)

For PVM-20M4U/20M4E:

Normal scan

7 % over scan of CRT effective screen

area

Under scan

5 % underscan of CRT effective screen

H. linearity

Less than 5.0 % (typical)

V. linearity

Less than 5.0 % (typical)

Convergence

Central area:

0.5 mm (typical)

Peripheral area: 0.7 mm (typical)

Raster size stability H: 1.0%, V: 1.5%

High voltage regulation

4.0 %

Color temperature

D65/D93, selectable

USER (3,200K-10,000K, factory

setting is D65)

For PVM-20M2U/20M2E

Normal scan

7 % over scan of CRT effective screen

агеа

Under scan

5 % underscan of CRT effective screen

H. linearity

Less than 5.0 % (typical)

V. linearity

Less than 5.0 % (typical)

Convergence

Central area:

0.6 mm (typical)

Peripheral area: 1.0 mm (typical)

Raster size stability H: 1.0%, V: 1.5%

High voltage regulation

4.0 %

Color temperature

D65/D93, selectable

USER (3,200K-10,000K, factory

setting is D65)

Inputs

For PVM-14M4U/14M4E/20M4U/20M4E:

LINE A/B

VIDEO IN

AUDIO IN

BNC connector (×2), 1Vp-p ±6 dB,

sync negative

Automatic 75 ohms termination

Phono jack (\times 2), -5 dBu^{a)}, more than

47 kilo-ohms

LINE C

Y/C IN 4-pin mini-DIN (×1)

See the pin assignment on page 19.

AUDIO IN

Phono jack (×1), -5 dBua), more than

47 kilo-ohms

RGB/COMPONENT

R/R-Y,G/Y,B/B-Y IN: BNC connector (×3)

R, G, B channels: 0.7 Vp-p, ±6 dB

Sync on green: 0.3 Vp-p, negative

R-Y, B-Y channels: 0.7 Vp-p, ±6 dB

Y channel: 0.7 Vp-p, ±6 dB

(Standard color bar signal of 75%

chrominance)

Automatic 75 ohms termination

AUDIO IN Phono jack (×1), -5 dBua), more than

47 kilo-ohms

EXT SYNC IN BNC connector (×1)

REMOTE

4 Vp-p, ±6 dB, sync negative

20-pin connector (×1) See the pin assignment on page 19.

a) 0 dBu = 0.775 Vr.m.s.

For PVM-14M2U/14M2E/20M2U/20M2E: General LINE A/B For PVM-14M4U: VIDEO IN BNC connector (x2), 1 Vp-p CRT SMPTE-C phosphor ± 6dB, sync negative Power consumption 90 Wh (with SDI: 99 Wh) Automatic 75 ohms termination Power requirements 120 V AC, 50/60Hz Phono jack (\times 2), -5 dBu^{a)}, more than **AUDIO IN** Operating temperature 47 kilo-ohms 0 to $+35^{\circ}$ C (32 to 95° F) LINE C Storage temperature -10 to +40°C (14 to 104°F) Y/C IN 4-pin mini-DIN (×1) Operating humidity 35 to 85% (no condensation) See the pin assignment on page 19. Storage humidity 0 to 90% Phono jack ($\times 1$), -5 dBu^{a} , more than AUDIO IN Dimensions (w/h/d) Approx. $346 \times 340 \times 431$ mm 47 kilo-ohms $(13\frac{5}{8} \times 13\frac{1}{2} \times 17 \text{ inches})$ RGB/COMPONENT not incl. projecting parts and controls R/R-Y,G/Y,B/B-Y IN: BNC connector (×3) Mass Approx. 16.7kg (36 lb 13 oz) R, G, B channels: 0.7 Vp-p ± 6dB Accessory supplied AC power cord (1) Sync on green: 0.3 Vp-p negative AC plug holder (1) R-Y, B-Y channel: 0.7 Vp-p ± 6dB Tally label (1) Y channel: 0.7 Vp-p ± 6dB Cable with a 20-pin connector (1) (Standard color bar signal of 75% chrominance) For PVM-14M4E: Automatic 75 ohms termination CRT EBU phosphor AUDIO IN Phono jack ($\times 1$), -5 dBu^a), more than Power consumption 90 Wh (with SDI: 99 Wh) 47 kilo-ohms Power requirements 100 to 240 V AC, 50/60Hz EXT SYNC IN BNC connector (×1) Operating temperature 4 Vp-p, ±6 dB, sync negative 0 to $+35^{\circ}$ C (32 to 95° F) REMOTE 20-pin connector (×1) Storage temperature -10 to +40°C (14 to 104°F) See the pin assignment on page 19. Operating humidity 35 to 85% (no condensation) Storage humidity 0 to 90% a) 0 dBu = 0.775 Vr.m.s.Dimensions (w/h/d) Approx. $346 \times 340 \times 431$ mm $(13\frac{5}{8} \times 13\frac{1}{2} \times 17 \text{ inches})$ not incl. projecting parts and controls Approx. 16.7kg (36 lb 13 oz) Mass Outputs (common to all models) Accessory supplied AC power cord (1) LINE A/B AC plug holder (1) VIDEO OUT BNC connector (×2) loop-through, Tally label (1) Automatic 75 ohms termination Cable with a 20-pin connector (1) **AUDIO OUT** Phono jack (×2) loop-through For PVM-14M2U: LINE C Y/C OUT 4-pin mini-DIN (×1) loop-through, P-22 phosphor Automatic 75 ohms termination Power consumption 90 Wh (with SDI: 99 Wh) Power requirements 120 V AC, 50/60Hz **AUDIO OUT** Phono jack (×1) loop-through Operating temperature RGB/COMPONENT R/R-Y,G/Y,B/B-Y OUT: BNC connector (×3) 0 to +35°C (32 to 95°F) Storage temperature -10 to +40°C (14 to 104°F) loop-through Operating humidity 35 to 85% (no condensation) Automatic 75 ohms termination **AUDIO OUT** Phono jack (×1) loop-through Storage humidity 0 to 90% **EXT SYNC OUT** BNC connector (x1) Dimensions (w/h/d) Approx. $346 \times 340 \times 431$ mm Automatic 75 ohms termination $(13\frac{5}{8} \times 13\frac{1}{2} \times 17 \text{ inches})$ Output level: 0.8 W Speaker output not incl. projecting parts and controls

Mass

Approx. 16.7kg (36 lb 13 oz)

Cable with a 20-pin connector (1)

AC plug holder (1) Tally label (1)

Accessory supplied AC power cord (1)

For PVM-14M2E:

CRT P-22 phosphor

Power consumption 90 Wh (with SDI: 99 Wh) Power requirements 100 to 240 V AC, 50/60Hz

Operating temperature

0 to +35°C (32 to 95°F)

Storage temperature -10 to +40°C (14 to 104°F) Operating humidity 35 to 85% (no condensation)

Storage humidity 0 to 90%

Dimensions (w/h/d) Approx. $346 \times 340 \times 431$ mm

 $(13\frac{5}{8} \times 13\frac{1}{2} \times 17 \text{ inches})$

not incl. projecting parts and controls

Mass Approx. 16.7kg (36 lb 13 oz)

Accessory supplied AC power cord (1)

AC plug holder (1) Tally label (1)

Cable with a 20-pin connector (1)

For PVM-20M4U:

CRT SMPTE-C phosphor

Power consumption 125 Wh (with SDI: 135 Wh)

Power requirements 120 V AC, 50/60Hz

Operating temperature

0 to $+35^{\circ}$ C (32 to 95° F)

Storage temperature $-10 \text{ to } +40^{\circ}\text{C} (14 \text{ to } 104^{\circ}\text{F})$ Operating humidity 35 to 85% (no condensation)

Storage humidity 0 to 90%

Dimensions (w/h/d) Approx. $450 \times 458 \times 503$ mm

 $(17^{3/4} \times 18^{1/8} \times 19^{7/8})$ inches)

not incl. projecting parts and controls

Mass Approx. 30.0 kg (66 lb 2 oz)

Accessory supplied AC power cord (1)

AC plug holder (1) Tally label (1)

Cable with a 20-pin connector (1)

For PVM-20M4E:

CRT EBU phosphor

Power consumption 130 Wh (with SDI: 140 Wh) Power requirements 100 to 240 V AC, 50/60Hz

Operating temperature

0 to +35°C (32 to 95°F)

Storage temperature -10 to +40°C (14 to 104°F) Operating humidity 35 to 85% (no condensation)

Storage humidity 0 to 90%

Dimensions (w/h/d) Approx. $450 \times 458 \times 503$ mm

 $(17^{3/4} \times 18^{1/8} \times 19^{7/8})$ inches

not incl. projecting parts and controls

Mass Approx. 30.0 kg (66 lb 2 oz)

Accessory supplied AC power cord (1)

AC plug holder (1) Tally label (1)

Cable with a 20-pin connector (1)

For PVM-20M2U:

CRT P-22 phosphor

Power consumption 115 Wh (with SDI: 125 Wh)

Power requirements 120 V AC, 50/60Hz

Operating temperature

0 to +35°C (32 to 95°F)

Storage temperature -10 to +40°C (14 to 104°F) Operating humidity 35 to 85% (no condensation)

Storage humidity 0 to 90%

Dimensions (w/h/d) Approx. $450 \times 458 \times 503$ mm

 $(17^{3}/4 \times 18^{1}/8 \times 19^{7}/8 \text{ inches})$

not incl. projecting parts and controls

Mass Approx. 30.0 kg (66 lb 2 oz)

Accessory supplied AC power cord (1)

> AC plug holder (1) Tally label (1)

Cable with a 20-pin connector (1)

For PVM-20M2E:

CRT P-22 phosphor

Power consumption 120 Wh (with SDI: 130 Wh) Power requirements 100 to 240 V AC, 50/60Hz

Operating temperature

 $0 \text{ to } +35^{\circ}\text{C} (32 \text{ to } 95^{\circ}\text{F})$

Storage temperature -10 to +40°C (14 to 104°F) Operating humidity 35 to 85% (no condensation)

Storage humidity 0 to 90%

Dimensions (w/h/d) Approx. $450 \times 458 \times 503$ mm

 $(17^{3}/4 \times 18^{1}/8 \times 19^{7}/8 \text{ inches})$

not incl. projecting parts and controls

Mass Approx. 30.0 kg (66 lb 2 oz)

Accessory supplied AC power cord (1)

AC plug holder (1)

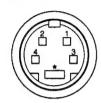
Tally label (1)

Cable with a 20-pin connector (1)

Design and specifications are subject to change without notice.

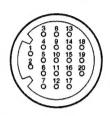
Pin assignment

Y/C IN connector (4-pin mini-DIN)



Pin No.	Signal	Description
1	Y-input	1 Vp-p, sync negative, 75 ohms
2	CHROMA subcarrier-input	300m Vp-p, burst Delay time between Y and C: within 0 ± 100 nsec., 75 ohms
3	GND for Y-input	GND
4	GND for CHROMA-input	GND

REMOTE connector (20-pin)



Pin No.	Signal	Wire color
1	Blue only	Brown
2	H/V DELAY	Red
3	MAIN/SUB*	Orange
4	EXT SYNC	Yellow
5	DEGAUSS	Green
6	R ch ON/OFF*	Blue
7	TALLY	Purple
8	LINE B	Grey
9	GND	White
10	GND	Black
11	GND	Pink
12	GND	Light Blue
13	LINE A	Spiral Orange
14	LINE/RGB	Spiral Yellow
15	GND	Spiral Green
16	L ch ON/OFF*	Spiral Blue
17	REMOTE	Spiral Purple
18	LINE C	Spiral Grey
19	UNDER SCAN	Spiral Pink
20	16:9	Spiral Light Blue

^{(*} For digital audio control)

How to connect a remote control unit Connect No.17 pin to one of the GND pins (No.9 – 12, and 15), then connect pins for the functions you want to use to other GND pins (No.9 – 12, and 15).

How to light the tally lamp Connect No.7 pin to one of the GND pins (No.9 - 12, and 15).

SAFETY CHECK-OUT

(US Model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

- Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
- Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
- Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
- Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
- Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
- Check the line cords for cracks and abrasion.
 Recommend the replacement of any such line cord to the customer.
- Check the B+ and HV to see if they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
- Check the metal trim, metallized knobs, screws, and all other exposed metal parts for AC leakage.
 Check leakage as described below.

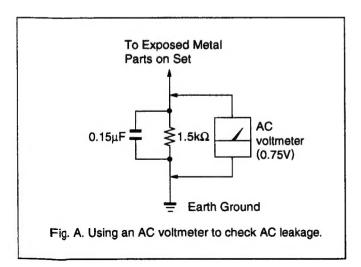
LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microampers). Leakage current can be measured by any one of three methods.

- A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufactures' instructions to use these instruments.
- A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
- 3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)



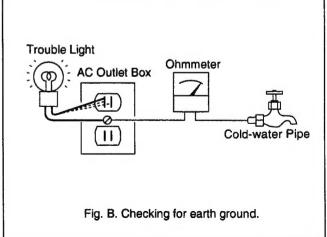


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(CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.

THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK A ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

(ATTENTION)

APRES AVOIR DECONNÈCTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION!!

AFIN D'EVITER TOUT RESQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE À SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ETLES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

Features

Picture

Horizontal resolution is more than 800 TV lines at the HR (High Resolution) Trinitron " picture tube HR Trinitron tube provides a high resolution picture. for PVM-14M4U/14M4E/20M4U/20M4E center of the picture.

Horizontal resolution is more than 600 TV lines at the Trinitron tube provides a high resolution picture. for PVM-14M2U/14M2E/20M2U/20M2E Trinitron¹⁾ picture tube center of the picture. When NTSC video signals are received, a comb filter activates to make more accurate Y/C separation. This contributes to less of a decrease in resolution, cross color and cross luminance phenomena.

Automatic termination The built-in beam current feedback circuit assures Beam current feedback circuit

Input

Analog RGB or component (Y, R-Y and B-Y) signals from video equipment can be input through these Analog RGB/component input connectors connectors.

The signal normally scanned outside of the screen can

Jnderscan mode Functions

be monitored in the underscan mode.

and the luminance signal (Y), can be input through this The video signal, split into the chrominance signal (C) two signals, which tends to occur in a composite video connector, eliminating the interference between the signal, ensuring video quality. Y/C input connectors

RGB scanning lines may appear on the top edge of the

screen. These are caused by an internal test signal,

rather than the input signal.

checked simultaneously in the H/V delay mode. The horizontal and vertical sync signals can be

Auto/manual degaussing

Horizontal/vertical delay mode

automatically when the power is turned on, or manually by pressing the DEGAUSS button. Degaussing of the screen can be performed

When the monitor is in the underscan mode, the dark

When the EXT SYNC selector is in the on position, the monitor can be operated on the sync signal supplied from an external sync generator. External sync input

when no cable is connected to the loop-through output The input connector is terminated at 75 ohms inside connector, the 75-ohm termination is automatically released. connector. When a cable is connected to an output (connector with -\/\- mark only)

display is obtained with all three cathodes driven with

In the blue only mode, an apparent monochrome

Blue only mode

a blue signal. This facilitates color saturation and phase adjustments and observation of VCR noise.

The monitor can display NTSC, PAL, SECAM and

Four color system available

stable white balance.

NTSC4432) signals. The appropriate color system is

selected automatically.

You can select the menu language from among five Five menu languages languages on the menu.

By using an MB-502B mounting bracket (for a 14-inch monitor, not supplied) or SLR-103A slide rail (for a 20-inch monitor, not supplied), the monitor can be EIA standard 19-inch rack mounting mounted in an EIA standard 19-inch rack.

For details on mounting, refer to the instruction manuals supplied with the mounting bracket kit or slide rail kit. SDI (Serial Digital Interface) Kit

When the serial number of the BKM-101C you want to By using the following optional SDI Kits, the monitor can display SMPTE 259M 4:2:2 serial digital signal - BKM-101C: Component SDI Kit (for video) Component SDI Kit (for audio) from a digital VCR. (ex. Sony 4:2:2 VCR) - BKM-102:

connect is less than 2,010,000, an optional connecting harness (part no. 1-900-230-35) will be required.

You can set color temperature, CHROMA SET UP.

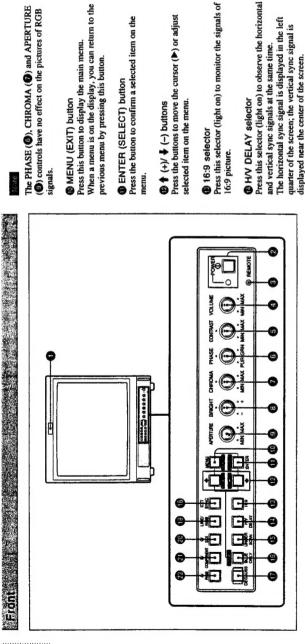
On-screen menus

and other settings by using the on-screen menus.

personal computers via the RS-422A serial interface. Interface Kit, the monitor can be controlled from By using the optional BKM-103 Serial Remote Serial Remote Interface Kit

 [&]quot;Trinitron" is a registered trademark of Sony Corporation.
 The NTSCa. system refers to an NTSC color system in which the subcarrier frequency is modified to 4.43MHz. When an NTSC recorded video program is played back with a Trident (PAL/SECAM/NTSCa.) VTR, the NTSCa. signal is

Location and Function of Parts and Controls



monitor is selected, indicating that the picture is being Lights up when the video camera connected to this Tally lamp

For details on how to light the tally lamp, see page 19.

Depress to turn on the monitor. The indicator will light POWER switch and indicator

cable to the REMOTE connector. The controls on the Lights up when you select ON on the USER PRESET front panel do not work when this indicator lights up. menu (see page 13), or when you connect a supplied For details on how to connect the cable, see page 19. B REMOTE indicator

Furn this control clockwise or counterclockwise to obtain the desired volume. O VOLUME control

© CONTRAST control

Turn this control clockwise to make the contrast higher or counterclockwise to make it lower.

NTSCAA color systems. Turn it clockwise to make the skin tones greenish or counterclockwise to make them This control is effective only for the NTSC and @ PHASE control purplish.

Furn this control clockwise to increase the color intensity or counterclockwise to decrease it. CHROMA control

furn this control clockwise to increase the brightness BRIGHT (brightness) control or counterclockwise to decrease it.

Turn this control clockwise to increase sharpness or counterclockwise to decrease sharpness. APERTURE control

EXT SYNC (external sync) selector

Set this selector to the off position (light off) to operate the monitor on the sync signal from the displayed video signal.

Set this selector to the on position (light on) to operate the monitor on an external sync signal through the EXT SYNC connector.

LINE/RGB input selector

Press this selector to select the input to be monitored. monitor the signal through the LINE A, LINE B or · Set this selector to the off position (light off) to LINE C connectors.

monitor the signal through the RGB/COMPONENT Set this selector to the on position (light on) to

C/SDI selector

LINE position (light off), press this selector (light When the LINE/RGB input selector is set to the on) to monitor the signal through the LINE C

RGB position (light on), press this selector (light on) to monitor the SDI signal (optional kits are required). When the LINE/RGB input selector is set to the

B/COMPONENT selector

 When the LINE/RGB input selector is set to the LINE position (light off), press this selector (light on) to monitor the signal through the LINE B connectors.

RGB position (light on), press this selector (light on) to monitor the component signal through the RGB/ · When the LINE/RGB input selector is set to the COMPONENT connectors.

The display size is reduced by approximately 5% so

that four corners of the raster are visible.

BLUE ONLY selector

RESET button

Press this selector (light on) for underscanning.

© UNDER SCAN selector

A/RGB selector

LINE position (light off), press this selector (light · When the LINE/RGB input selector is set to the on) to monitor the signal through the LINE A connectors.

RGB position (light on), press this selector (light on) to monitor the RGB signal through the RGB/ When the LINE/RGB input selector is set to the COMPONENT connectors.

"chroma" and "phase" adjustments and observation

of VCR noise.

monochrome picture on the screen. This facilitates

Only blue signal is displayed as an apparent

 As the BLUE ONLY selector, press this selector (light on) to eliminate the red and green signals. ("Phase" adjustment is effective only for the NTSC

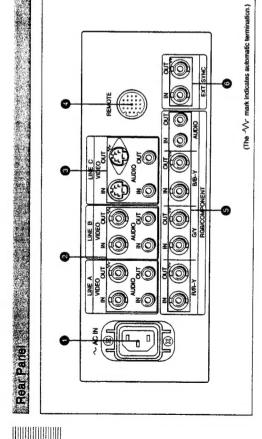
settings by pressing this button when a menu is on

As the RESET button, you can reset the menu

DEGAUSS button

demagnetized. Wait for 10 minutes or more before Press this button momentarily. The screen will be ising this button again.

Location and Function of Parts and Controls



Connect the supplied AC power cord to this socket and AC IN socket to a wall outlet.

Ø LINE A, LINE B connectors

I'wo groups (A and B) of line input connectors for the composite video and audio signals and their loopthrough output connectors.

off) and press the A/RGB or B/COMPONENT selector set the LINE/RGB selector to the LINE position (light To monitor the input signal through these connectors, (light on).

VIDEO IN (BNC)

Connect to the video output of video equipment, such For a loop-through connection, connect to the video as a VCR or a color video camera. output of another monitor.

VIDEO OUT (BNC)

Loop-through output of the VIDEO IN connector. Connect to the video input of a VCR or another When the cable is connected to this connector, the 75-ohm termination of the input is automatically released, and the signal input to the VIDEO IN connector is output from this connector.

AUDIO IN (phono jack)

For a loop-through connection, connect to the audio microphone via a suitable microphone amplifier. Connect to the audio output of a VCR or to a output of another monitor.

When the EXT SYNC selector is set to the off position

R/R-Y IN, G/Y IN, B/B-Y IN (BNC)

selector (light on).

(light off), the monitor operates on the sync signal

from the G/Y channel.

Loop-through output of the AUDIO IN connector. Connect to the audio input of a VCR or another AUDIO OUT (phono jack)

Connect to the analog RGB signal outputs of a video

camera, etc.

To monitor the RGB signal

LINE C connectors nonitor.

Connect to the Y/C separate output of a video camera, VCR or other video equipment. For a loop-through connection, connect to the Y/C separate output of a VCR or another monitor. Y/C IN (4-pin mini-DIN)

Connect to the Y/C separate input of a VCR or another Loop-through output of the Y/C IN connector. Y/C OUT (4-pin mini-DIN)

ohm termination of the input is automatically released, and the signal input to the Y/C IN connector is output from this connector. When the cable is connected to this connector, the 75-

Connect to the audio output of a VCR or a microphone AUDIO IN (phono jack)

(via a suitable microphone amplifier).

Connect to the R-Y/Y/B-Y component signal inputs of a Betacam video recorder, etc.

To output the component signal

AUDIO IN (phono jack)

Loop-through output of the AUDIO IN connector Connect to the audio input of a VCR or another

AUDIO OUT (phono jack)

Connect to the audio output of video equipment when the analog RGB or component signal is input.

Loop-through outputs of the AUDIO IN connector. AUDIO OUT (phono jack)

Press the EXT SYNC selector (light on) to use the **©** EXT SYNC (external sync) connectors sync signal through this connector.

front panel will be turned on and off by the connected

equipment. This connector can also be used for

connecting a remote control unit.

For details on the pin assignment of this connector, see

page 19.

special-effect generator, etc. The tally lamp on the

Connect to the tally output of a control console,

❶ REMOTE connector (20-pin)

monitor.

When this monitor operates on an external sync signal, connect the reference signal from a sync generator to this connector.

RGB signal or component signal input connectors and

their loop-through output connectors.

B RGB/COMPONENT connectors

set the LINE/RGB selector to the RGB position (light on), and press the A/RGB or B/COMPONENT To monitor the input signal through these connectors,

Loop-through output of the IN connector. Connect to the external sync input of video equipment to be synchronized with this monitor.

ohm termination of the input is automatically released, and the signal input to the IN connector is output from When the cable is connected to this connector, the 75this connector.

of a Sony Betacam video camera, etc.

Connect to the R-Y/Y/B-Y component signal outputs

To monitor the component signal

Loop-through outputs of the R/R-Y IN, G/Y IN, B/B-R/R-Y OUT, G/Y OUT, B/B-Y OUT (BNC) Y IN connectors.

When the cables are connected to these connectors, the released, and the signal inputs to the R/R-Y IN, G/Y 75-ohm termination of the inputs is automatically IN, B/B-Y IN connectors are output from these

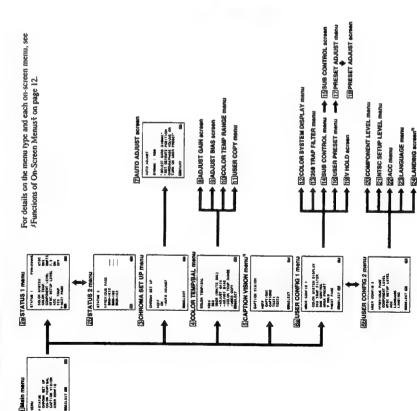
Connect to the analog RGB signal inputs of a video To output the RGB signal printer or another monitor.

Jsing On-Screen Menus

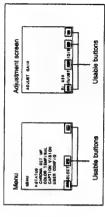
You can make various settings and adjustments of the monitor using the on-screen menus.

On Sgreen Menu Configuration

On-screen menu tree-chart



adjustment screens are displayed at the bottom of the screen. You can perform menu operation using the The buttons that can be used on the menus and displayed buttons. Operation through On-Screen Menus



MENU/EXIT
 bufton

@ 1/+ button

386

o **g** [2]

There are five menu operation buttons on the front

panel of the monitor.

Menu operation buttons

Display of the usable menu operation buttons

Operating procedures

To display the menu, follow this procedure.

© ENTER/ SELECT button

⊕ 4/- button

RESET button

િ≱ર્ફ્સ

The following table shows how these five buttons function when using the menus.

Button To adjust them temperated

return to the previous menu return to the previous menu select an adjustment item

decide a selected item

6 ENTER MENU

0

Press the MENU/EXIT (①) button. MENU ([1]: main menu) appears. 2 Move the cursor (*) to the desired setting menu by pressing the 4/- or 1/+ (0, 0) button.

3 Press the ENTER/SELECT (@) button.

The setting menu selected in step 2 appears.

4 Move the cursor (▶) to the desired item by pressing the ♦/- or †/+ (♠, ♠) button.

5 Press the ENTER/SELECT (@) button.

The adjustment screen or setting menu selected in step 4 appears.

reset current settings to the factory setting

® RESET 9

move the cursor (>) downwards move the cursor (*) upwards

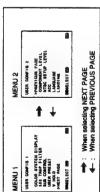
decrease selected value

For detailed information of menus, see Functions of On-Screen Menus? on page 12.

^{5]} CAPTION VISION menu is provided with PVM-14MAU/14MZU/20M4U/20MZU only.
23] LANDING screen is provided with PVM-20M4U/20M4E only.

Using On-Screen Menus

To display the next (or previous) page of the Select NEXT PAGE on the menu to display the next page and PREVIOUS PAGE on the menu to display the previous page.



How to display the next or the previous page

Each time you press the MENU/EXIT (1) button, the To close the menu (to return to the regular displayed. Press the MENU/EXIT () button on-screen menu returns to the one previously screen)

For PVM-14M4E/14M2E/20M4E/20M2E: For the first time when the monitor is turned on, the LANGUAGE menu (23) will appear on the screen. So, select the language you want to use.

2a STATUS 1 menu Shows the current settings.



1 Move the cursor (V) to the desired language by pressing the \$/- or \$/+ (4), (4) button.

Press the MENU/EXIT () button.

N



Unless you press the MENU/EXIT (11) button in the procedure above, the LANGUAGE menu will always appear whenever you turn on the monitor.

Functions of On-Screen Menus

Select an item to adjust on the menus and screens (12)

through [19]). To go to the USER CONFIG 2 menu,

select NEXT PAGE.

There are four types of on-screen menus.

(6b) USER CONFIG 2 menu Select an item to adjust on the menus and screens (20) You can enter another menu such as status menu or

through [24]). To go to the USER CONFIG I menu select PREVIOUS PAGE.

press ENTER/SELECT to start automatic "chroma" [7]AUTO ADJUST screen Select the color bar signal (full, SMPTE, EIA) and To activate these adjustments, select ON on the CHROMA SET UP menu ([3]). and "phase" (NTSC signal only) adjustments.

screen on this menu by using the 1/+, 1/- and

ENTER/SELECT buttons.

You can select an item or enter an adjustment

Setting menu

You can confirm the current settings.

Status menu

setting menu. Main menu

BADJUST GAIN screen Adjust GAIN in USER mode. 9 ADJUST BIAS screen Adjust BIAS in USER mode.

([] indicates the factory setting.)

adjustments you made remain unchanged until next change even if you turn off the power.

Adjustment screen You can make adjustments on this screen. The

Select another menu and press ENTER/SELECT to go

1 Main menu

to the menu.

[5000K-10000K] Select the color temperature range in USER mode. **10**COLOR TEMP RANGE menu

Store the factory setting of D65 or D93 as the value for IIJUSER COPY menu USER mode.

the color system type being used appears on the screen Select the color system type. When AUTO is selected, [AUTO] 12 COLOR SYSTEM DISPLAY menu each time you change the signal input.

[OFF] Color spill or color noise may be eliminated if you 13358 TRAP FILTER menu select ON (NTSC signal only). Normally select OFF.

"phase" (NTSC signal only) adjustments done on the AUTO ADJUST screen ([7]).

③CHROMA SET UP menu Select ON on this menu to activate "chroma" and

[2b] STATUS 2 menu Shows what optional kit is installed in the monitor.

4]COLOR TEMP/BAL menu Select the color temperature from among D65, D93 and USER. USER is set to D65 as the factory setting.

You can adjust or change the color temperature in USER mode (a measuring instrument is required).

Select an item (CONTRAST, BRIGHT, CHROMA and PHASE controls on the front panel) to finely adjust on the SUB CONTROL screen ([15]) 4 SUB CONTROL menu

[D65]

[5]CAPTION VISION menu This menu is provided only for PVM-14M4U/14M2U/

Vision. To display it, select the caption type in this

The monitor can display the signal with Caption

20M4U/20M2U.

Finely adjust the selected item on the SUB CONTROL CHROMA and PHASE control) has a click position at the center of its adjustment range. You can adjust the menu (14). Each control (CONTRAST, BRIGHT, **ISSUB CONTROL screen**

If you select ON on this menu, the REMOTE indicator setting of the click position with this feature. 16 USER PRESET menu

To adjust the user preset settings, select the PRESET ADJUST menu (III). lights up and the controls on the front panel do not work. The monitor operates with the user preset settings.

CONTRAST, VOLUME, and APERTURE controls to a desired level and can use these settings by selecting You can preset the BRIGHT, CHROMA, PHASE, ON on the USER PRESET menu ([16]) TPRESET ADJUST menu

PHASE, CONTRAST, VOLUME, and APERTURE Adjust the selected item (BRIGHT, CHROMA, control) on the PRESET ADJUST menu ([17]) 18 PRESET ADJUST screen

When you cannot read the display, select the input that Adjust the vertical hold if the picture rolls vertically. 19V HOLD screen is not connected.

Select the component level from among three modes. For PVM-14M4U/14M2U/20M4U/20M2U for 100/7.5/75/7.5 signal N10/SMPTE for 100/0/100/0 signal for 100/0/75/0 signal 20 COMPONENT LEVEL menu BETA 7.5 BETA 0

BETA 7.5] [N10/SMPTE] For PVM-14M4E/14M2E/20M4E/20M2E

2

repeatedly until the regular screen appears.

Using On-Screen Menus

21NTSC SETUP LEVEL menu

The 7.5 setup level is mainly used in north America. Select the NTSC setup level from two modes. The 0 setup level is mainly used in Europe.

For PVM-14M4U/14M2U/20M4U/20M2U

[7.5] [0] For PVM-14M4E/14M2E/20M4E/20M2E

置ACC menu Set ACC (Auto Color Control) circuit on or off. When

[NO] the fine adjustment is necessary, select OFF on the 23LANGUAGE menu Normally select ON. ACC menu.

languages (English, German, French, Italian, Spanish). [ENGLISH] You can select the menu language from among five

24LANDING screen

DEGAUSS button, you can adjust the landing so as to This menu is provided only for PVM-20M4U/20M4E. The following two methods are available to adjust the If the color is not uniform even after you press the obtain color uniformity on this screen.

landing.

When the signals of the horizontal lines are input and displayed:

When the signals of the white color are input and displayed on the screen in horizontally as possible. Press the \$/- or \$/+ button until the lines are

Press the \$\int \- or \$\frac{1}{2} + button until the white color on the screen become as uniform as possible. displayed:

To reset the setting to standard (00), press the RESET button.

Connections

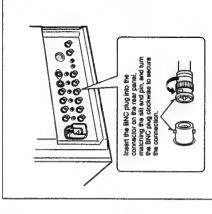
How to Connect the AC Power Cord.

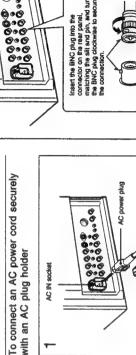
Connect the AC power cord (supplied) to the AC IN socket and to a wall outlet.

Pull out the AC plug holder while pressing the lock To remove the AC power cord

How to Connect a Cable to a BNC Connector

Connect a coaxial cable with the BNC plugs to the BNC connectors on the rear panel as illustrated below.





000

with an AC plug holder

AC IN socket

to AC IN

S

Plug the power cord into the AC IN socket. Then, attach the AC plug holder (supplied) on top of the AC power

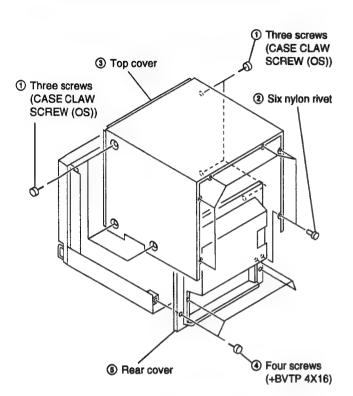
AC plug holder

Slide the AC plug holder over the cord until it locks.

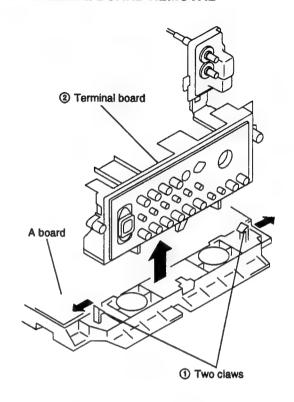
7

SECTION 2 DISASSEMBLY

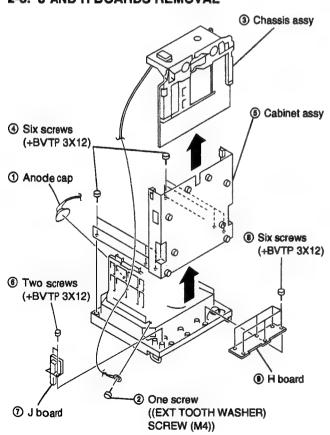
2-1. TOP COVER AND REAR COVER REMOVAL



2-2. TERMINAL BOARD REMOVAL

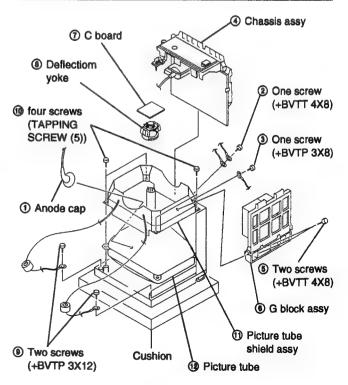


2-3. J AND H BOARDS REMOVAL

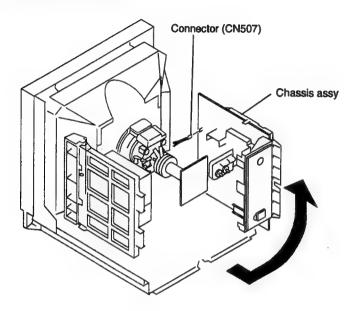


2-4. PICTURE TUBE REMOVAL

When exchange the Picture tube of PVM-14M4 series and if the magnet had stuck on the neck of the Picture tube, peel it.

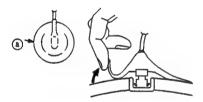


2-5. SERVICE POSITION

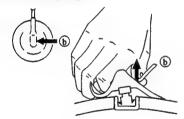


• REMOVAL OF ANODE-CAP

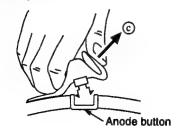
NOTE: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.



• REMOVING PROCEDURES



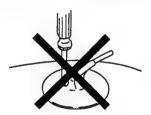
① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



- ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow **(b)**.
- When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow @.

• HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material!
- ② Don't press the rubber hardly not to hurt inside of anodecaps! A material fitting called as shatter-hook terminal is built in the rubber.
- 3 Don't turn the foot of rubber over hardly! The shatter-hook terminal will stick out or hurt the rubber.





SECTION 3 SET-UP ADJUSTMENTS

3-1. PREPARATIONS (1)

Service Mode

This set is provided with a switch for service on the front panel that can be used to make various adjustments. The operation method of this switch is explained in detail below.

1. Entering the service mode

Simultaneously press the [ENTER] key and the [DEGAUSS] key shown on the display of the menu.

2. Service mode display

(1)	(5)	(4)	(3)	(6)
(2)				

Range of Service Mode Display

- The service items are largely classified into 16 types displayed by titles.
- (2) The names of the service items or READ/WRITE guidance, etc., are displayed. The names are displayed to the left and the guidance to the right.
- (3) This is the serial number for each of the service items. 1-120.
- (4) This is the adjustment data for the service items that are now stored in the RAM. Adjustments can be made by changing these values, but as long as nothing is written to the ROM the adjustment values will be erased by turning off the power or by reading, so please be careful.
- (5) When the adjustment data that is now displayed is identical with the data in the ROM, the cursor (►) is displayed.
- (6) The present status is displayed.
 - [*]: Writing to the ROM. Make sure not to turn off the power while this display is on.
 - [?]: ROM reading error. In this case, an image is output with the standard adjustment data that the microcomputer itself possesses. [¿]: Problem in the I2C bus.

3. Finishing the service mode

Simultaneously press the [ENTER] key and the [DEGAUSS] key shown on the display of the menu.

4. Easy ON/OFF of the service mode

If once entering the service mode after having turned on the power, easy ON/OFF is possible by once more pressing the A, B or C switch on the front panel (the LED lights) as long as the power is not turned off or as long as the service mode is not finished.

5. Change of position of the service mode display

If the switch is continuously pressed when turning on in the above easy mode, the display position moves in the V direction. This method is used when the display is outside of the effective screen area.

6. Change of service items

The items are returned with the [MENU] key and forwarded with the [ENTER] key. When a key is continuously pressed, the operation will be repeated.

7. Change of service data

The service data is made larger with the [†] key and smaller with the [1] key. When continuously pressing the keys, the operation will be repeated.

8. Reading of service data

When reading data from the ROM to the RAM, press the [B/O] key once and check than the READ display is shown in the guidance, and then press the [B/O] key once again. The adjustment data that is written will return to its previous state, so please be careful.

9. Writing of service data

When writing data from the RAM to the ROM, press the [DE-GAUSS] key once and check that the WRITE display shown in the guidance, and then press the [DEGAUSS] key once again. Not only the displayed data will be written, but all data, so please be careful.

10. Carrying out FACTORY RESETTING

In case the adjustment data has been destroyed for some reason, and you keep pressing the [B/O] key at the beginning of the above reading, the READ guidance will change to FACTORY RESET guidance in approximately 3 seconds so that the factory resetting can be carried out. By once again pressing the [B/O] key after this, resetting will be carried out ([*] will be displayed as status) and factory resetting will be executed. However, in case the data available at the time of shipment from the factory has been destroyed, or if the ROM has been replaced, etc., or if factory setting mentioned later on has been carried out, factory resetting is executed.

11. Carrying out FACTORY SETTING

Make sure to make possible the above factory resetting by making a copy of the adjustment data when replacing the ROM. If you keep pressing the [DEGAUSS] key at the beginning of the above writing, the WRITE guidance will change into FACTORY RESET guidance after approximately 3 seconds. By once again pressing the [DEGAUSS] key after this, setting will be carried out ([*] will be displayed as status) and the data will be copied. By carrying out this operation, the selection items of the menu and the adjustment values will be reset to the standard conditions, so please be careful. If this operation is carried out once, it cannot be carried out again, but the FACTORY SET FLAG (No. 120) in the service mode can be set to 1.

Table 3-1 Table map (1)

** Signify (The setting is vary with the destination.)
Refer to the "Table 3-1 Table map (2)."

No.	SERVICE ITEM		MAX	STD	No.	SERVICE ITEM		MAX	STD
1	NOR 50 DEF	H FREQUENCY	255	85	61	C/T1 D??	BIAS <red></red>	1023	376
2		VIDEO PHASE	255	139	62	G. I. D. I.	BIAS <green></green>	1023	512
3		V SIZE	255	139	63		BIAS <blue></blue>	1023	396
4	NOR 60 DEF	H FREQUENCY	255	96	64		GAIN <red></red>		
5	110.100 DE	VIDEO PHASE	255	115	65		GAIN <red></red>	1023	660
6		V SIZE	255	137	66			1023	620
7	NORDEF	V CENTER	255	103	67		GAIN <blue> B/O <red></red></blue>	1023	602
8		HSIZE	255	108	68		B/O <green></green>	255	115
9		PIN PHASE	255	128	69	C/T2 D??	3200K SW	255	115
10		PIN AMP	255	128	70	GIZDII		1	0
11		LOWER PIN AMP	255	128		·	BIAS <red></red>	1023	256
12		UPPER PIN AMP			71		BIAS <green></green>	1023	512
13		SEXY	255 255	128	72		BIAS <blue></blue>	1023	512
14				128	73		GAIN <red></red>	1023	602
15		V LINEARITY V BOW	255	120	74		GAIN <green></green>	1023	700
			ස	32	75		GAIN <blue></blue>	1023	672
16		LOWER BOW	63	32	76		B/O <red></red>	255	95
17	110 055	V ANGLE	63	32	77		B/O <green></green>	255	108
18	U/S DEF	V SIZE <50>	255	100	78	W/B	SUB CON <4 :3,NORMAL>	255	178
19		V SIZE <60>	255	100	79		SUB CON <4:3,H// DELAY>	255	97
20		H SIZE	255	118	80		SUB CON <16 : 9,NORMAL>	255	150
21		PIN PHASE	255	128	81		SUB CON <16 :9,H/V DELAY>	255	78
22	40 .01105 555	PIN AMP	255	100	82		SUB BRIGHT	255	69
23	16 : 9 NOR DEF	V SIZE <50>	255	72	83		USER B/O <red></red>	255	115
24		V SIZE <60>	255	60	84		USER B/O <green></green>	255	115
25		PIN PHASE	255	135	85	OTHER	LANDING	255	64
26		PIN AMP	255	90	86		V HOLD	255	128
27	16:9 U/S DEF	V SIZE <50>	255	61	87		H BLANKING	255	73
28		V SIZE <60>	255	39	88		V BLANKING <50>	255	82
29		PIN PHASE	255	135	89		16:9 BLANKING START <50>	255	32
30		PIN AMP	255	65	90		16:9 BLANKING END <50>	255	176
31	COMPONENT	SUB PHASE	255	130	91		V BLANKING <60>	255	161
32		SUB CHROMA < NORMAL>	255	182	92		16:9 BLANKING START <50>	255	42
33		SUB CHROMA <smpte></smpte>	255	170	93		16:9 BLANKING END <50>	255	226
34		R-Y LEVEL	255	163	94		H DELAY	255	142
35	NTSC	BURST GATE PULSE WIDTH	255	52	95		V DELAY	255	104
36		CRYSTAL	255	59	96		HP POSITION	255	145
37		PHASE <normal></normal>	255	80	97		HP WIDTH <normal></normal>	255	148
38		PHASE <acc off=""></acc>	255	96	98		HP WIDTH <h delay="" v=""></h>	255	62
39		B-Y PHASE	255	162	99	SYSTEM	SDI AUDIO	7	5
40		CHROMA < NORMAL>	255	98	100		358 TRAP FILTER	1	0
41		CHROMA <acc off=""></acc>	255	27	101		ACC	1	0
42		R-Y LEVEL	255	98	102		CAPTION VISION	7	0
43	NTSC 443	CRYSTAL	255	82	103		COMPONENT LEVEL	3	*
44		PHASE <normal></normal>	255	62	104		NTSC SETUP LEVEL	1	*
45		PHASE <acc off=""></acc>	255	64	105		CHROMA SET UP	+	0
46		B-Y PHASE	255	181	106		COLOR SYSTEM DISPLAY	3	-
47		CHROMA < NORMAL>	255	104	107		COLOR TEMPERATURE	3	-
48		CHROMA <acc off=""></acc>	255	36	108		USER PRESET	1	0
49		R-Y LEVEL	255	100	109		LANGUAGE	7	0
50	PAL	PHASE <normal></normal>	255	110	110		RGB SYNC	1	0
51		PHASE <acc off=""></acc>	255	105	111		OPTION BOARD	7	0
52		B-Y PHASE	255	122	112		AGING MODE		0
53		CHROMA <normal></normal>	255	109	113		PAL-M	1	0
54		CHROMA <acc off=""></acc>	255	41	114		MODEL		لــنـــا
55		R-Y LEVEL	255	121	115			31	*
<i>∞</i> 56	SECAM	CHROMA	255				COLOR TEMP DISP 1	127	*
57	OLOMVI	R-Y LEVEL	255	93 181	116 117		COLOR TEMP DISP 2	127	*
58		COLOR BALANCE <r-y></r-y>	255				REMOTE ADDRESS	83	0
		COLOR BALANCE <b-y></b-y>	225	118 135	118 119		RESERVED 1 RESERVED 2	1	0
FO. 1			663	1.333	1191			2	0
59 60	C/T1 D??	3200K SW	1	0	120		FACTORY SET FLAG	1	0

Table 3-1 Table map (2)

Model Name	Component level	NTSC Set-up level	Model	Color temp disp 1	Color temp disp 2
PVM-20M4U	1	1	0	65	93
PVM-20M2U	1	1	1	65	93
PVM-20M4J	2	0	2	93	65
PVM-20M4E	2	0	3	65	93
PVM-20M2E	2	0	4	65	93
PVM-14M4U	1	1	5	65	93
PVM-14M2U	1	1	6	65	93
PVM-14M4J	2	0	7	93	65
PVM-14M1J	2	0	8	93	65
PVM-14M4E	2	0	9	65	93
PVM-14M2E	22	0	10	65	93
PVM-20M4A	2	0	11	65	93
PVM-14M4A	2	0	12	65	93
PVM-14M2A	2	0	13	65	93
PVM-14M4B	1	1	14	65	93
BVM-14M4DJ	2	0	15	93	65
BVM-14M4DE	2	0	16	65	93
PVM-20M4T	2	0	17	93	65
PVM-14M4T	1	0	18	93	65

3-2. Preparation (2). Initialization

 Supply composite video or component signals as shown in Table 3-2.

Table 3-2

Signal		Details of signal	Standard level P-W	
Composite video	358NT)	100% white	0.714V	
VIGEO	443NT }	75% white	0.536V	
	PALM	100% white	0.7V	
	SECAM	75% white	0.525V	
		100% white Y	0.7V	
	BETA0	75% white Y	0.525V	
		75%color B-Y, R-Y	0.7V	
Component		only)		
		100% white Y	0.7V	
	SMPTE	75% white Y	0.525V	
		75%color B-Y, R-Y	0.525V	
		(P-P for this item only)		
Voice	s/sound	-5dBs	0.436Vrms	

^{*} Refer to Table 3-3 for groups of models.

Table 3-3

Group of models		Models	
1	PVM-14M4U PVM-14M4A	PVM-14M4J	PVM-14M4E
2	PVM-14M2U	PVM-14M2E	PVM-14M2A
3	PVM-14M1J		
4	PVM-20M4U PVM-20M4A	PVM-20M4J	PVM-20M4E
5	PVM-20M2U	PVM-20M2E	

^{*} In this chapter, indicates the control items in the service mode.

Example: 60 H-FREQ

3-3. Writing model data

 Write model data on respective models in the service mode at the location of No.114 MODEL in accordance with Table 3-4.

Table 3-4

Model	Model data
PVM-20M4U	0
PVM-20M2U	1
PVM-20M4J	2
PVM-20M4E	3
PVM-20M2E	4
PVM-14M4U	5
PVM-14M2U	6
PVM-14M4J	7
PVM-14M1J	8
PVM-14M4E	9
PVM-14M2E	10
PVM-20M4A	11
PVM-14M4A	12
PVM-14M2A	13

Write the following data in the service mode at the location of No.115 COLOR TEMP DISP 1.

COLOR TEMP DISP 1

U/C, AEP <u>65</u> J <u>93</u>

Write the following data in the service mode at the location of No.116 COLOR TEMP DISP 2.

COLOR TEMP DISP 2

U/C, AEP 93 J 65

* Standard inspection state

Unless otherwise specified in this manual, make adjustment under the following conditions:

APERTURE MIN (Turn FLAT fully counterclockwise.) BRIGHT 50% (Center click) **CHROMA** 50% (Center click) PHASE 50% (Center click) **CONTRAST** 80% (Center click) **VOLUME** 50%

^{*} Before turning off the power after adjustment in the service mode, write the adjustment data. When the power is turned off before writing, adjusted data will all be lost.

3-4. Picture output

1. AC input voltage setting

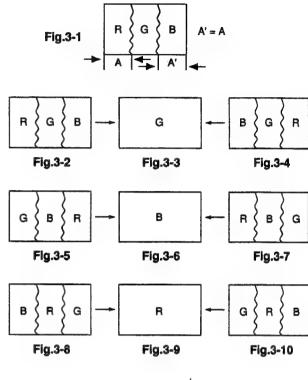
- Input VIDEO signals and AUDIO signals to respective terminals on the connector panel.
- 2. Set the sliduck AC voltage as shown in Table 3-5.

Table 3-5

Group o	Voltage	
PVM-14M4J(J) PVM-14M1J(J)	PVM-20M4J(J)	AC 100±3V (Distortion factor:3% max.)
PVM-14M4U(U/C) PVM-20M2U(U/C)	PVM-14M2U(U/C) PVM-20M4U(U/C)	AC 120±3V (Same as above)
PVM-14M4E(AEP) PVM-14M2A(AUS) PVM-20M4E(AEP) PVM-20M4A(AUS)	PVM-14M2E(AEP) PVM-14M4A(AUS) PVM-20M2E(AEP)	AC 220±3V (Same as above)

3-5. Landing adjustment

- 1. CONT ... MAX BRT ... Conspicuous position
- 2. Roughly adjust the white balance, G2, and convergence.
- 3. Switch the rotary SW of the single color switch to change the color into green only.
- Adjust the purity knob so that the green will come to the center of the screen. Make R and B almost identical. (Fig. 3-1)
- 5. Switch to B only, R only, and G only and verify each. (Figs.3-1, 3-2, and 3-3)
- Bring the deflection yoke gradually forward and adjust the deflection yoke so that R and B on both sides of the screen will be green. (Fig.3-2 → Fig. 3-3)
- If the deflection yoke comes forward too much, the pattern shown in Fig.3-4 will appear. If so, move the deflection yoke backward. (Fig.3-4 → Fig.3-3)
- Switch the single color switch to B and verify the single color. (Fig. 3-6)
- Switch the single color switch to R and verify the single color. (Fig. 3-9)
- 10. When two colors are mixed, set the mixed color as the standard, and repeat operations 6 and 7.
- 11. Switch to an all-white signal and check the uniformity.
- 12. When the deflection yoke position is determined, fasten it with the fixture.



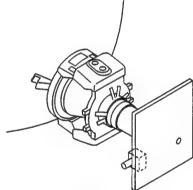


Fig.3-11

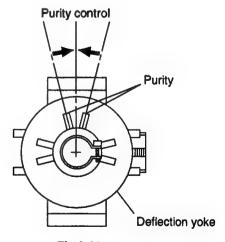


Fig.3-12

Note: Attach NTC magnets for 20M4 to the locations shown in Fig.3-13.

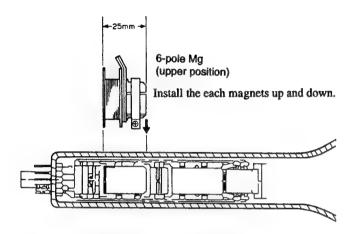


Fig. 3-13

3-6. Convergence adjustment (1)

- Input a dot pattern signal. CONT ... Conspicuous position BRT ... MIN
- Align the horizontal R, G, and B dots at the center of the screen with the H-START VR.
- When H-CENT is changed after H-STAT adjustment, readjust H-STAT. (H-STAT will change by means of H-CENT VR.)
- 3. Align the vertical location of R, G, and B in the center of the screen with the V-STAT Mg. (Fig. 3-14, 3-15)
- * After V-STAT adjustment, paint-lock the knob.

V-STAT Mg knob

While keeping the angles A and B equal (I = I), align the vertical convergence.

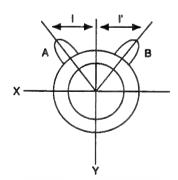


Fig. 3-14 Good example

If the A and B knobs are not symmetrical $(I \neq I')$, the focus may deteriorate, beam striking or other adverse effects may occur.

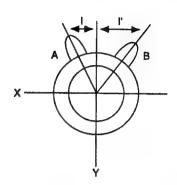


Fig. 3-15 Bad example

4. For HMC, use the BMC Mg to adjust the R and B dots so that they will be symmetrical horizontally with respect to the G dot.

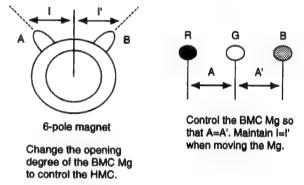


Fig. 3-16

For VMC, use the MBC Mg to adjust the R and B dots so that they will be symmetrical vertically with respect to the G dot.

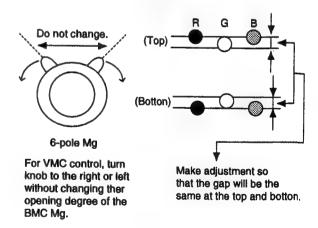


Fig. 3-17

6. Repeat adjustments 2. to 5.

- * The above adjustment may affect the landing, so after adjustment, check the landing again.
- 7. Paint-lock the knobs after adjustment.

3-7. Deflection yoke neck rotation adjustment

- If there is nonconvergence on both sides of the X or Y axis of the screen, turn the neck of the deflection yoke in the direction of the arrow to hold the nonconvergence for the entire CRT screen within the tolerance.
- * Applicable only to groups of models 1, 2, 3, and 5.
- (1) Reverse cross (2) Regular cross misconvergence misconvergence pattern pattern Move the deflection yoke Move the deflection yoke downward. upward. BGR RGB R G B GR GR GB 0 **á** ò ò RGB BGR

Fig. 3-18

(3) Pattern of left-sided deflection yoke

- Fig. 3-19
- (4) Pattern of right-sided deflection yoke

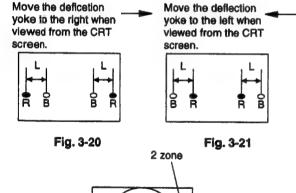


Fig. 3-23

1 zone

- 2. Turn the neck of the deflection yoke to align the V pin vertically.
- * Applicable only to group of models 4.

3. Insert the wedge between the deflection yoke and CRT funnel to lock the deflection yoke. (Fig. 3-24)



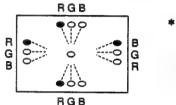
Groups of models 1,2,3,and 5 have been treated.



Group of models 4 have been treated.

Fig. 3-24

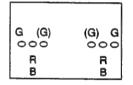
4. The following patterns cannot be corrected by turning the neck. (Figs.3-25, 3-26, and 3-27)



*Gun rotatuon

The X-axis and Y-axis beams are distorted on both sides.

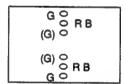
Fig. 3-25



*HCR Large(Small)

The horizontal portion of the G raster is wider(narrower) than that of the RB raster on both sides of the screen.

Fig. 3-26



*VCR Large(Small)

The vertical portion of the G raster is wider(narrower) than that of the RB raster on both sides of the screen.

Fig. 3-27

3-8. Convergence adjustment (2)

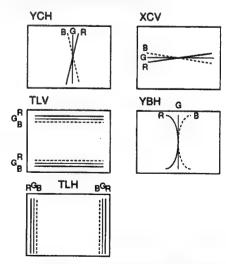


Fig. 3-28 Convergence compensation VR,coii,and compensator

Note: When adjustment is insufficient, use permalloy for perfect adjustment.

1. Group of models 4 (See Table 3-3.)

- 1. Input a cross-hatch signal.
- 2. Make adjustment with the TLV, YCH, YBH VR, and XCV coils of the deflection yoke to minimize nonconvergence.
- When the nonconvergence of the TILT component is included in the horizontal convergence, make adjustment with the TLH compensator. (Fig.3-28)

2. Groups of models 1, 2, and 3 (See Table 3-3.)

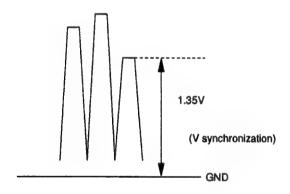
- 1. Input a cross-hatch signal.
- Make adjustment with the TLV, YCH VR, and XCV coils of the deflection yoke to minimize nonconvergence.
- 3. When the nonconvergence of the TILT component is included in the horizontal convergence, insert the TLH compensator into the deflection yoke for adjustment. (Fig. 3-28)

3. Group of models 5 (See Table 3-3.)

- 1. Input a cross-hatch signal.
- Make adjustment with the XCV coil of the deflection yoke to minimize nonconvergence.
- When the nonconvergence of the TILT component is included in the vertical convergence, insert the TLV compensator into the deflection yoke for adjustment. (Fig.3-28)

3-9. G2 adjustment

- 1. Input a 525 monoscope signal.
- 2. Connect the probe of the oscilloscope to TP403 on the A board.
- 3. Measure the lowest reference pulse of the three.
- Make adjustment with SCREEN VR so that the left end of the waveform will be 1.35 V±0.05 V.



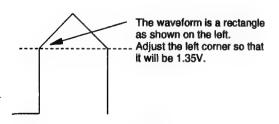


Fig. 3-29

3-10. White balance adjustment

- 1. Input a 525 monoscope signal. (Input from LINE A or B with no burst.)
- 2. Set as follows:

CONT: 0%

BRT: 50%

 Adjust <u>SUB-BRIGHT</u> in the service mode so that the 20-tone gray scale will be as follows:

0 and 5 IRE → Cut off

10 IRE → Slight glow

- 4. Input 525 all-white (COMPOSITE signal without burst).
- 5. Set CONT VR to 80%.
- Adjust the all-white luminance so that the screen luminance will be 3 NIT.
- Press MENU and select COL TEMP/BAL.
- 8. Select 6500K.

Set [3200K SW] to "0" for both 9300K and 6500K.

- 9. Put the unit into the service mode.
- 10. Adjust to the standard values with <RED> and <BLUE> of C/T1 6500K BIAS or C/T2 6500K BIAS .
 Set cut-off to 3 NIT.

<GREEN>

Group of models (Table 3-3)	Fix as follows:
2, 3, 5	"400"
1, 4	"512"

- 11. Switch the all-white signal luminance to 100 IRE.
- 12. Adjust to the standard values with <RED> and <BLUE> of <a href="https://creensormals.org/line-standard-stan

Set it to "700."

- 13. Repeat adjustment (10, 11, and 12) until the adjustment is complete, and then write the adjustment data.
- 14. Press MENU and select COL TEMP/BAL.
- 15. Select 9300K.
- Adjust CT2 9300K BIAS
 CT2 9300K GAIN or CT1 9300K BIAS
 CT1 9300K GAIN in the same manner as adjustments 1013.

BIAS < GREEN>

Group of models (Table 3-3)	Fix as follows:
2, 3, 5	"400"
1, 4	"512"

GAIN <GREEN>
Fix it at <u>"700."</u>

3-11. Blue-only white balance adjustment

- Turn ON the blue-only of the user controller SW. (To set blue-only.)
- Input all-white (COMPOSITE signal without burst). The all-white signal luminance shall be 100 IRE. CONT: 80% BRT: 50%
- 3. Select COL TEMP/BAL.
- 4. Select 6500K.
- 5. Adjust to the standard values with C/T1 6500K B/O<RED> and C/T1 6500K B/O<GREEN> OF C/T2 6500K B/O<RED> and C/T1 6500K B/O<GREEN> .
- 6. Select COL TEMP/BAL.
- 7. Select 9300K.
- 8. Adjust to the standard values with C/T2 9300K B/O<RED> and C/T2 9300K B/O<GREEN> or C/T1 9300K B/O<RED> and C/T1 9300K B/O<GREEN>
- Adjust the all-white signal luminance, and check that the white balance is satisfactory when the luminance of the screen is 8NIT.

3-12. SUB BRT adjustment

- 1. Input a 525 monoscope signal.
- 2. CONT ... MIN BRT CENTER (50&)
- 3. Select SUB BRIGHT in the service mode.
- Adjust SUB BRIGHT so that 10 IRE glows slightly and 0 IRE is cut off.

3-13. Focus adjustment

1. PVM-20M4 Series

- Adjust the H focus (upper side of focus pack) by means of a dot signal.
- Adjust the V focus (lower side of focus pack) by means of a dot signal.
- Turn the H focus fully clockwise when viewed from the front by means of a dot signal.
- Turn the H focus counterclockwise and focus well the dot in the center of the screen. When the dot is well focused, it will be divided into two sections.
- 5. Turn the H focus VR clockwise (returning direction) so that the dot will be as shown in Fig.3-30. At that time, both ends of the central section of the screen are in the same state.



Fig. 3-30

- Check that the resolution is more than 800 lines by means of a digital monoscope signal.
- 7. Check that the magenta ring is unconspicuous by means of an all-white signal.



Fig.3-31 Movement of VR when viewed from the front

2. PVM-14M4 Series

- Adjust the H focus (upper side of focus pack) by means of a dot signal.
- Adjust the V focus (lower side of focus pack) by means of a dot signal.
- Turn the H focus fully clockwise when viewed from the front by means of a dot signal.
- Turn the H focus counterclockwise and focus the dot in the center of the screen well. The dot signal is divided into two sections at that time.
- Turn the H focus VR counterclockwise so that the dost will be as shown in Fig.3-32. At that time, both ends of the central section of the screen are in the same state.



Fig. 3-32

- Check that the resolution is more than 800 lines by means of a digital monoscope signal.
- Check that the magenta ring is unconspicuous by means of an all-white signal.

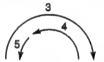
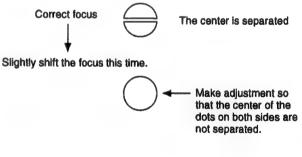


Fig.3-33 Movement of VR when viewed from the front

3. PVM-14M2 Series (CRT14MG)

Make adjustment so that the dots in the central section (right and left edges) will be undivided, respectively. (When well-focused, the dot is divided into two sections.)



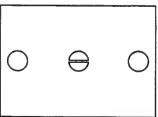


Fig. 3-34

4. PVM-20M2 Series

Focus the character "30" in the center of monoscope well as usualy.

SECTION 4 SAFETY RELATED ADJUSTMENT

When the parts (with a M , mark on the circuit diagram) shown below are replaced, confirm the matters described in items 4-1 and 4-2 shown below.

R1536

R551, R506, R519, R518, R516, R515, R508, R517, R1560, R1537, C549, C512, C513, C523, C592, D501, D533, Q500, O511, IC500, and IC507

When the following parts are replaced, check the +B voltage: IC600, IC602, D610, C615, C631, C621, C632, and T603

Confirmation procedure

- 1. Input 120 VAC.
- Input a monoscope signal, and minimize CONTRAST and BRIGHT.
- 3. Check that the voltage of the CN605 @ pin is 115.7 VDC.

4-1. CONFIRAMATION OF +B MAXIMUM

Standard: Less than 115.7 VDC (CN605 pin (3)) Check Condition Input voltage: 130 VAC

Note: Use NF Power Supply or make sure that distortion factor is

3% or less.

Input signal: Monoscope

Controls: BRT & CONT → Normal

4-2. CONFIRAMATION OF HOLD-DOWN CIRCUIT

Check Condition Input voltage: 130 VAC

Input signal: White &Dot

Controls: BRT & Cont → Max. & Min.

4-2-1.Hold-Down Circuit (+B)

- a) Adjust the beam current to 600±50µA with the pin ♠ of CN605 with the external DC power supply (less than 127.0 VDC) to the point just before the hold-down circuit works.

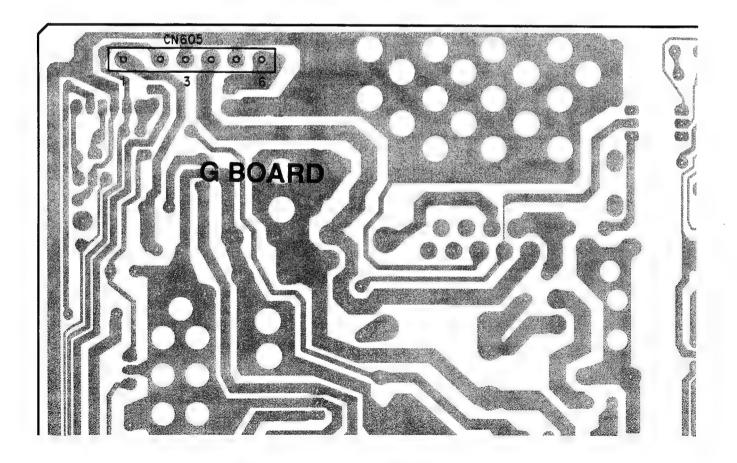
 Input Signal: White
- Adjust the beam current to 80±20μA with the pin ⑥ of CN605 with the external DC power supply (less than 127.0 VDC) to the point just before the hold-down circuit works.
 Input Signal: Dot

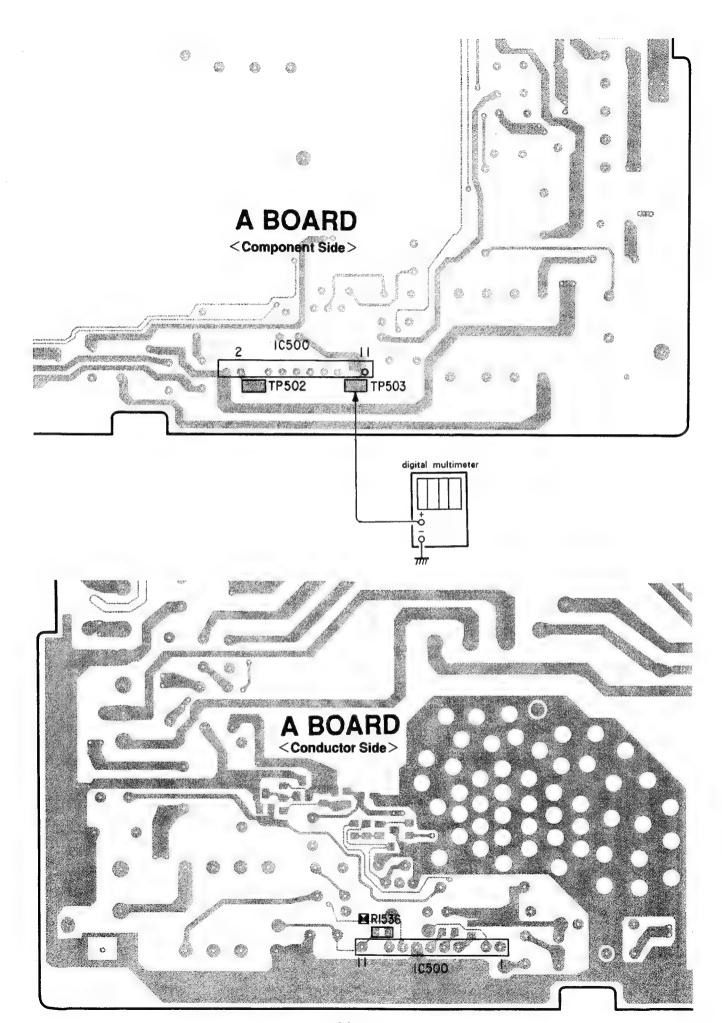
4-2-2. Hold-Down Circuit (3rd Wire voltage of FBT)

Check item: Check of pin 10 of IC500 voltage: more than 110.0VDC

- a) Adjust the beam current to 600±50µA with the pin ① of IC500 with the external DC power supply (less than 141.0 VDC)to the point just before the hold-down circuit works.

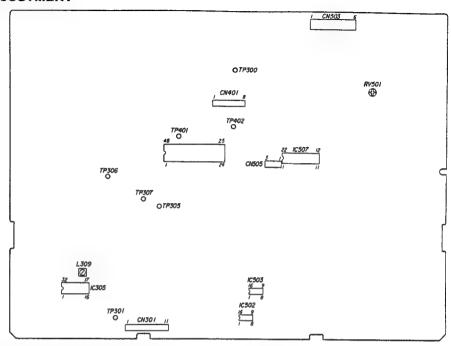
 Input Signal: White
- b) Adjust the beam current to 80±20µA with the pin ① of IC500 with the external DC power supply (less than 141.0 VDC) to the point just before the hold-down circuit works. Input Signal: Dot





SECTION 5 CIRCUIT ADJUSTMENTS

5-1. A BOARD ADJUSTMENT



1. PREPARATION/SIGNAL SPECIFICATIONS

1. Signal specifications

 Supply a composite video or component signals from the CN301 connector. Refer to Table 5-1 to take into consideration the effect on the Q board.

The level of the signal to supply should equal to values shown in Table 5-1 plus/minus 2% max.

Table 5-1

Signal		Details ofsignal	Standard level (Pedestal white)	Reduction rate %	Connector supply level (P-W)
		100% white	0.714V	93%	0.664V
	358NT)	75% white	0.536V	•	0.496V
Composite video (75% color	443NT }	Burst (Green section) (P-P for this item only)	286mV (632mV)	94% (94%)	269mV (594mV)
bar)		100% white	0.7V	*	0.651V
	PAL	75% white	0.525V	,	0.488V
:	SECAM PAL M	PAL burst (Green section) (P-P for this item only)	300mV (664mV)	94% (94%)	282mV (624mV)
		100% white	0.7V	94.8%	0.664V
	BETA 0	75% white	0.525	•	0.498V
Compo- nent		75% color B-Y, R-Y (P-P for this item only)	0.7V	•	0.664V
(75% color		100% white	0.7V	*	0.664V
bar)	bar)	75% white	0.525V	*	0.498V
	SMPTE	75% color B-Y, R-Y (P-P for this item only)	0.525	*	0.498V

2. Preparation

* In this chapter, indicates the control items in the service mode.

Example: 60 H-FRQ

Write the applicable model data at the location of NO.114 MODEL in the service mode.

Group of models 4 ... 0

Group of models 5 ... 1

Group of models 1 ... 5

Group of models 2 ... 6

Group of models 3 ... 8

* Refer to Table 5-2 for the following groups of models.

Table 5-2

Group of models		Models	
1	PVM-14M4U PVM-14M4A	PVM-14M4J	PVM-14M4E
2	PVM-14M2U	PVM-14M2E	PVM-14M2A
3	PVM-14M1J		
4	PVM-20M4U PVM-20M4A	PVM-20M4J	PVM-20M4E
5	PVM-20M2U	PVM-20M2E	

* CONT 80% is the center click position of the user controller.

2. ADJUSTMENT OF DEFLECTION SYSTEM

1. Adjustment of horizontal oscillation frequency

- 1. Input a 525 monoscope signal.
- 2. CONT ... 80% BRT ... 50%
- 3. Set the unit in the service mode.

 Connect the IC507 ① PIN on the A board to GND via the 100μ/ 16V chemical capacitor. (Use CN505 ③ PIN for GND.) Or insert the H-FREQ jig into CN505.

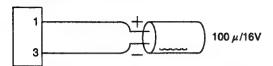


Fig.5-1 H-FREQ jig

- Adjust 60 H-FREQ so that the slanting lines on the screen will be vertical. (Fig.5-2)
- 6. Input a 625 monoscope signal.
- Adjust 50 H-FREQ so that the slanting lines on the screen will be vertical. (Fig. 5-2)

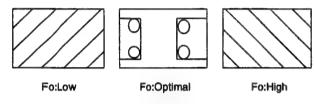


Fig.5-2

2. H BLANKING adjustment

- 1. Input a 525 monoscope signal.
- 2. CONT ... 80% BRT ... 50%
- 3. Set the unit in the service mode.
- Observe the anode of TP300 or D516 with an oscilloscope, and adjust <u>H-BLANKING</u> so that the waveform will be as shown in Fig.5-3.

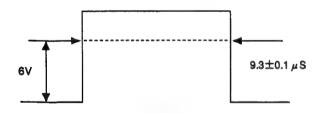


Fig.5-3

3. Picture phase adjustment

- 1. Input a 525 monoscope signal.
- 2. Set the unit in the UNDER SCAN mode.
- 3. CONT ... Min. BRT Max.
- 4. Set the unit in the service mode.
- Adjust <u>UNH-SIZE</u> so that the white frame of the monoscope will be approx. 1 cm to the inside of the effective screen.
- 6. Turn RV501 (H-CENT) so that B = B'.
- Adjust 60 VIDEO PHASE so that the signal area will be in the center (A = A') of the deflection area. (Fig.5-4)
- 8. Input a 625 monoscope signal.
- 9. Adjust 50 VIDEO PHASE in the same manner.

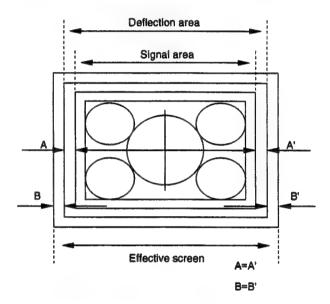


Fig.5-4

4. V BLANKING adjustment

- 1. Input a 525 monoscope signal.
- 2. Set the unit in the UNDER SCAN mode.
- 3. CONT ... Min. BRT ... Max.
- 4. Set the unit in the service mode.
- Adjust V-BLANKING <600 so that the white frame in the upper section of the monoscope will be about to be blanked.

Note: Blanking up to the point 1H away from the white frame is permissible, but the adjusting center should be up to the point 0.5H away from the frame.

- Cancel the UNDER SCAN mode, and set the unit in the normal 16:9 mode.
- Adjust 16:9 BLANKING START 60> and 16:9 BLANKING END 60> so
 that the number of frames in the vertical direction in the luminous section of the screen will be 11.74 and the BLK quantity at
 the top and bottom will be the same.

Note: Make adjustment before 16:9 V-SIZE adjustment.

- 8. Input a 625 monoscope signal.
- 9. In the same way as 5. shown above, adjust V-BLANKING <50>.
- 10. Adjust [16:9 BLANKING START < 50> and [16:9 BLANKING END < 50>], in the same was as 6. and 7., so that the number of frames in the vertical direction in the luminous section of the screen will be 11.2 and the BLK quantity at the top and bottom will be the same.

5. Vertical deflection adjustment

- 1. Input a 525 monoscope signal.
- 2. CONT ... 80% BRT ... 50%
- 3. Set the unit in the service mode.
- 4. Roughly adjust NOR 60 V.SIZE so that the size will be 12 frames. Adjust V.LIN with V.LIN.

Adjust CENT with V.CENT.

V.CENT must be reviewed after adjustment of V.LIN.

Adjust NOR 60 V.SIZE so that it will equal the standard value.

- 5. Set the unit in the 16:9 mode by the user controller SW.
- 6. Make the same adjustment with 16:9 NOR V.SIZE <60>.
- 7. Set the unit in the NORMAL SCAN mode.
- 8. Input a 625 signal.
- Adjust NOR 50 V.SIZE so that the SIZE will equal the standard value.
- 10. Set the unit in the 16:9 mode.
- 11. Adjust 16:9 NOR V.SIZE <50> so that it will equal the standard value.

Table 5-3 NORMAL V. SIZE standard

	525		625
4:3	1	11.75±0.2 frames	11.2±0.2 frames
10.0	14"	154mm	4
16:9	20"	217mm	-

6. Horizontal deflection adjustment (Normal scan adjustment)

- 1. Input a 525 monoscope signal.
- 2. CONT ... 80% BRT 50%
- 3. Set the unit in the service mode.
- 4. Rough adjustment of H.SIZE

Roughly adjust NOR H.SIZE so that H.SIZE will be 15.75 frames.

 Adjust the horizontal deflection by means of NOR PIN AMP, NOR PIN PHASE, NOR U.PIN AMP, SEXY, V BOW, V ANGL, NOR H SIZE, L. PIN AMP, and L. V BOW.

(While correcting a distorted parallelogram and curvature with V.ANGL and BOW, make adjustment so that the horizontal and vertical lines of the screen will be straight.)

- 6. Set the unit in the 16:9 mode.
- 7. Make the same adjustment as 5. with 16:0 NOR PIN AMP and 16:9 NOR PIN PHASE

Table 5-4 NORMAL H. SIZE standard

	525	625
4:3	11.75±0.2 frames	15.0±0.2 frames
16:9	11.75±0.2 frames	15.0±0.2 frames

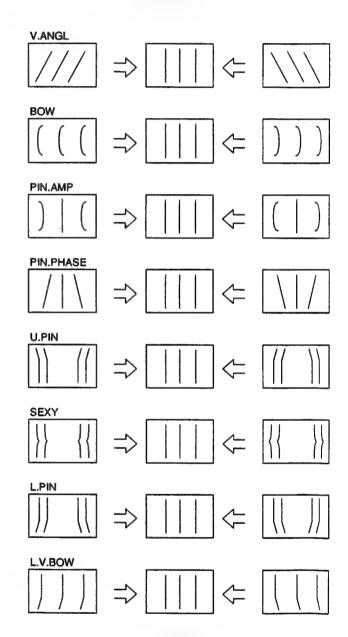


Fig.5-5

Horizontal deflection adjustment (UNDER SCAN adjustment)

- 1. Input a 525 monoscope signal.
- 2. CONT ... 80% BRT ... 50%
- 3. Set the unit in the U/S mode.
- 4. Set the unit in the service mode.
- Adjust <u>U/S V SIZE <60</u> so that UNDER V.SIZE will be within the standard.
- Adjust <u>U/S H SIZE</u> so that UNDER H.SIZE will be within the standard.
- 7. Adjust <u>U/S PIN AMP</u> and <u>U/S PIN-PHASE</u>. (Adjust tracking according to 5., 6., and 7.)
- After adjustment, the white frame of the monoscope shall not be out of the effective screen.
- 9. Set the unit in the 16:9 mode.
- 10. Make the same adjustment with 5. and 7. by means of 16:9 U/S V SIZE <60>, 16:9 U/S PIN-AMP and 16:9 U/S PIN-PHASE.

Table 5-5
Standerd values for groups of models 1, 2, and 3 (14")

	525	625
U/S H-SIZE V-SIZE	252mm 188mm	-
16 : 9 U/S V-SIZE	142mm	■ -minute

Table 5-6
Standerd values for groups of models 4 and 5 (20")

	525	625
U/S H-SIZE V-SIZE	364mm 272mm	•
16 : 9 U/S V-SIZE	205mm	4

- 11. Set the unit in the 16:9 mode.
- 12. Input a monoscope signal.
- 13. Make the same adjustment with 5. by means of U/S V SIZE < 50>.
- 14. Set the unit in the 16:9 mode.
- 15. Make the same adjustment with 5. by means of 16:9 U/SV SIZE <50>.

Note: If there is not time enough for adjustment (5. Vertical deflection adjustment and 6. and 7. Horizontal deflection adjustment), confirm that the respective sections will operate normally and that adjustment is possible, and then input standard adjustment values.

8. H/V-DELAY adjustment

Note: This item applies only to groups of models 1, 2, 4, and 5.

- 8-1. H-DELAY adjustment
- 1) Input a 525 monoscope signal.
- 2) CONT ... 80% BRT 50%
- 3) Set the unit in the H/V DELAY mode.
- 4) Set the unit in the service mode.
- 5) Connect the probe of an oscilloscope to IC503 ⑦ PIN. Adjust HDELAY so that the output waveform will be as shown in Fig.5-6

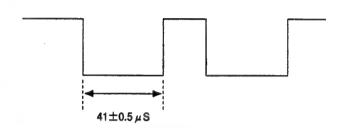


Fig.5-6

- 8-2. V-DELAY adjustment
- 1) Input a 525 monoscope signal.
- 2) CONT ... 80% BRT 50%
- 3) Set the unit in the H/V DELAY mode.
- 4) Set the unit in the service mode.
- 5) Connect the probe of an oscilloscope to IC502 PIN. Adjust VDELAY so that the output waveform will be as shown in Fig.5-7

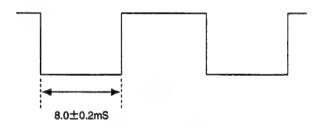


Fig.5-7

8-3. Confirmation of screen Confirm that the screen is as shown in Fig.5-8.

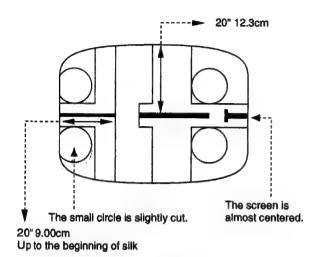


Fig.5-8

9. Writing adjustment results

Write the adjustment results.

Note: Do not turn off the power before writing the adjustment results; otherwise, they will all be lost.

3. Signal system adjustment

1. SUB CON adjustment during NORM and H/V DL

Note: H/V-DL is not applicable to the group of models 3.

Adjustment must be completed before the HUE adjustment of NTSC358/443.PAL.

1. Input a vertical white line signal.

Note: Use a vertical white line signal (without 525 burst; H width of 3µS; 100IRE).

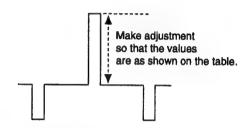
- 2. CONT ... 80% BRT 50%
- Connect the probe of an oscilloscope to CN401 (3) PIN on the A board.
- 4. Set the unit in the service mode.
- Temporarily input "69" as an adjustment value for SUB.BRIGHT. Set the values in Table 5-7 as BIAS and GAIN data of C.TEMP1 and C.TEMP2.

Table 5-7

Group of models	1, 4	2, 3, 5
BIAS GREEN	512	400
GAIN GREEN	700	700

6. Adjust the pedestal or the distance between SYNCTIP and WHITE by means of SUB CON <4:3, NOR>

SUB CON <4:3, H/V DELAY], SUB CON <16:9, NOR>, and SUB CON <16:9, NOR>.
SUB CON <4:3. NOR>
SUB CON <16:9. NOR> (Fig.5-9)

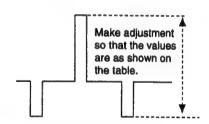


SUB-CON 4:3. H/V-DL SUB-CON 16:9, H/V-DL

Group of models	4	1	5	2	3
4:3	1.39Vp-p	1.16Vp-p	1.37Vp-p	1.47V p -p	1.47Vp-p
16:9	1.22Vp-p	1.04Vp-p	1.19Vp-p	1.32Vp-p	1.32Vp-p

Fig. 5-9

SUB CON <4:3. H/V DELAY>
SUB CON <16:9. H/V DELAY> (Fig.5-10)



SUB-CON 4:3. H/V-DL SUB-CON 16:9. H/V-DL

Group of models	4	1	5	2
4:3	1.39Vp-p	1.16Vp-p	1.37Vp-p	1.47Vp-p
16:9	1.22Vp-p	1.04Vp-p	1.19Vp-p	1.32Vp-p

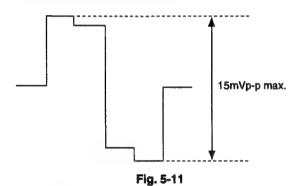
Fig. 5-10

Note: Not applicable to PVM-14M1J

2. SUB PHASE adjustment

Note: Not applicable to the group of models 3.

- Input a component color bar (R-Y) and EXT SYNC. (BETA 0 level signal)
- 2. Set the unit in the EXT SYNC mode for component input.
- 3. Connect the probe of an oscilloscope to IC404 @ PIN or TP402.
- 4. Set the unit in the service mode.
- 5. Adjust SUB PHASE so that the output waveform will be minimum (15 mVp-p or less). (Fig.5-11)



3. SUB PHASE adjustment

Note: Not applicable to groups of models 1, 2, 4, and 5.

- 1. Input an NTSC color bar.
- Connect L309 to GND and TP307 to 5V line (L320 line), respectively.
- 3. Set the unit in the service mode.
- Adjust SUB PHASE so that the output waveform will be minimum (15 mVp-p or less). (Fig.5-11)

4. SUB CHROMA adjustment

Note: Not applicable to the group of models 3.

- Input component color bars (R-Y, Y, and B-Y). (BETA 0 level signal)
- 2. Set COMPONENT LEVEL to BETA 0 via MENU.
- 3. Connect the probe of an oscilloscope to IC404 @ PIN or TP402.
- 4. Set the unit in the service mode.
- Adjust <u>SUB CHROMA NORMAL</u> so that the peaks of waveforms will be flush with each other as shown in Fig.5-12.

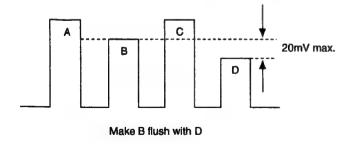


Fig. 5-12

5. SUB COL adjustment

Note: Not applicable to groups of models 1, 2, 4, and 5.

- 1. Set the unit in the service mode.
- 2. Input adjustment value 98 to SUB CHROMA NORMAL. (Fig.5-12)

6. R-Y LEVEL adjustment

Note: Not applicable to the group of models 3.

- Input component color bars (R-Y, Y, and B-Y). (BETA 0 level signal)
- 2. Set COMPONENT LEVEL to BETA 0 via MENU.
- 3. Connect the probe of an oscilloscope to IC404 (4) PIN or TP401.
- 4. Set the unit in the service mode.
- 5. Adjust R-Y LEVEL COMPONENT so that the peaks of waveforms will be flush with each other as shown in Fig.5-13.

Make adjustment so that B = D as shown above. (20 mV max.) Check that the difference between B and C is 30 mV or less.

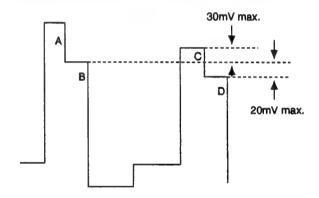


Fig. 5-13

7. SUB CHROMA N10/SMPTE

Note: Not applicable to the group of models 3.

- Input component color bars (R-Y, Y, and B-Y). (SMPTE level signal)
- 2. Set COMPONENT LEVEL to N10/SMPTE via MENU.
- 3. Connect the probe of an oscilloscope to IC404 30 PIN or TP402.
- 4. Set the unit in the service mode.
- 5. Adjust SUB CHROMA SMPTE so that the levels of B and D will be the same. (Fig.5-14)

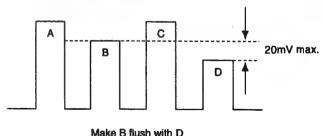


Fig. 5-14

8. Adjustment of burst gate pulse width

- 1. Input an NTSC color bar.
- Connect the probe of an oscilloscope to TP301 (COMP-SYNC) and Q363 (E) or IC305 ① PIN. (Exercise care since IC305 (1) PIN is a high-impedance line.)
- 3. Set the unit in the service mode.
- Adjust BGF WIDTH so that the output waveforms will be as shown in Fig.5-15.

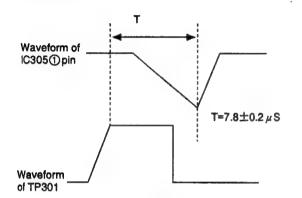
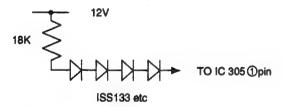


Fig. 5-15

9. VXO adjustment

- 9-1. X'tal 358
- 1) Input an NTSC color bar.
- 2) Connect a frequency counter to IC305 ② PIN.
- 3) Set the unit in the service mode.
- 4) Connect IC305 ① PIN as shown in Fig.5-16.
- Adjust NTSC CRYSTAL so that the counter reading will be within the standard values shown below. (Adjustment may be made at a point at which the color flickering stops.)

X'tal 358 standard vlaue: 3579545±20 Hz



(Arrange 4 Di's as close as possible to ①PIN at the shortest possible distance.)

Fig. 5-16

9-2. X'tal 443

- 1) Input a 443 NTSC color bar.
- 2) Connect a frequency counter to IC305 @ PIN.
- 3) Set the unit in the service mode.
- Connect IC305 ① PIN in the same way as 9.-4) in 9. VXO adjustment.
- Adjust NTSC 443 CRYSTAL in the same way as 9.-5) in 9. VXO adjustment.

X'tal 443 standard value: 4433619±20 Hz

10. NTSC - NTSC443 - PAL color demodulation adjustment

Note: 10-1, is not applicable to the group of models 3.

10-1. NT358PHASE (NORMAL)

- 1) Input an NTSC color bar.
- 2) Connect the probe of an oscilloscope to TP306.
- 3) Set the unit in the H/V DELAY mode.
- 4) Set the unit in the service mode.
- Adjust PHASE NTSC 358 NOR so that the burst section of the output waveform will be straight. (Fig.5-17)

10-2. NT 358 PHASE (ACC OFF)

- 1) Conduct ACC OFF via MENU.
- Make adjustment in the same way as 10-1, shown above by means of [PHASE NTSC 443 ACC OFF]. (Fig. 5-17)

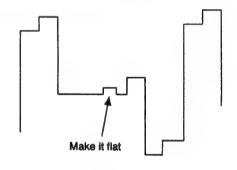


Fig. 5-17

10-3. NT 358 B-Y PHASE

Note: Make adjustment after PHASE adjustment and before CHROMA adjustment.

- Input an NTSC color bar. (Input only the R-Y component. B-Y and Y should be OFF.)
- 2) Connect the probe of an oscilloscope to TP305.
- 3) Set the unit in the service mode.
- Adjust B-Y PHASE NTSC 358 so that the color components will be straight.

10-4. NT 358 CHROMA (NORMAL)

- 1) Input an NTSC color bar.
- 2) Connect the probe of an oscilloscope to IC404 **②** PIN or TP402.
- 3) Set the unit in the service mode.
- 4) Adjust CHROMA NTSC 358 NOR so that the peaks of waveforms will be flush with each other as shown in Fig.5-18.

10-5. NT 358 CHROMA (ACC OFF)

Note: 10-5. is not applicable to the group of models 3.

- 1) Conduct ACC OFF via MENU.
- Adjust CHROMA NTSC 358 ACC OFF in the same way as 10-4. shown above. (Fig.5-18)

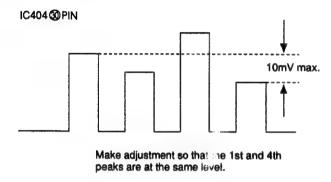
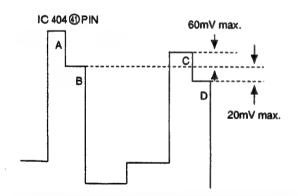


Fig. 5-18

10-6. NTSC 358 R-Y LEVEL

Note: Be sure to set ACC in the ON position before this adjustment.

- 1) Input an NTSC 358 color bar.
- 2) Connect the probe of an oscilloscope to IC 404 @PIN or TP401.
- 3) Set the unit in the service mode.
- 4) Adjust R-Y LEVEL NTSC 358 so that the peaks of waveforms will be flush with each other as shown in Fig. 5-19.



Make adjustment so that B=D as shown above.(20mV max.) Check that the difference between B and C is less than 60mV.

Fig. 5-19

10-7. NTSC 443 PHASE (NORMAL)

Note: 10-7-3). is not applicable to the group of models 3.

- 1) Input an NTSC 433 color bar.
- 2) Connect the probe of an oscilloscope to TP306.
- 3) Set the unit in the H/V DELAY mode.
- 4) Set the unit in the service mode.
- Adjust PHASE NTSC 443 NOR so that the burst section of the output waveform will be straight. (Fig. 5-20)

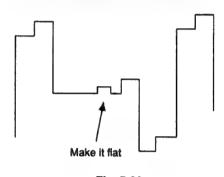


Fig. 5-20

10-8. NTSC 443 PHASE (ACC OFF)

Note: 10-8. is not applicable to group of models 3.

- 1) Conduct ACC OFF via MENU.
- Adjust PHASE NTSC 443 ACC OFF in the same way as 10-7-5). (Fig.5-21)

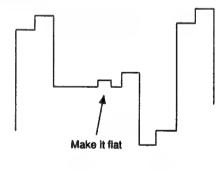


Fig. 5-21

10-9. NTSC 443 B-Y PHASE NTSC 443 CHROMA NOR

Note: Be sure to set ACC in the ON position before this adjust-

ment.

Note: Remove HV.DELAY before this adjustment.

- 1) Input an NTSC 443 color bar.
- 2) Connect the probe of an oscilloscope to TP402.
- 3) Set the unit in the service mode.
- 4) While tracking by means of **B-Y PHASE NTSC 443** and **CHROMA NTSC 443 NOR**, make adjustment so that the peaks of waveforms will be the same. (Fig. 5-22)

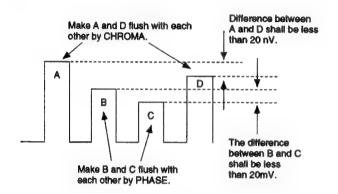


Fig. 5-22

10-10. NTSC 443 CHROMA (ACC OFF)

Note: 10-10. is not applicable to the group of models 3.

- 1) Conduct ACC OFF via MENU.
- Adjust [CHROMA NTSC 443 ACC OFF] in the same way as 10-9-4). (Fig.5-23)

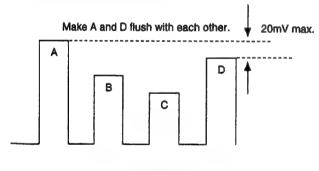


Fig. 5-23

10-11. NT 443 R-Y LEVEL

Note: Be sure to set ACC in the ON position before this adjustment.

- 1) Input an NTSC 443 color bar.
- 2) Connect the probe of an oscilloscope to TP401.
- 3) Set the unit in the service mode.
- 4) Adjust R-Y LEVEL NTSC 443 in the same way as 10-6-4). (Fig.5-24)

Make adjustment so that B = D. (20 mV max.) Check that the difference between B and C is 60 mV or less.

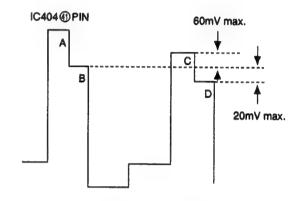
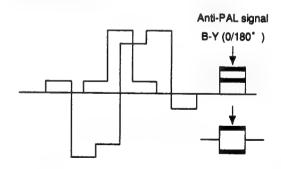


Fig. 5-24

10-12. PAL PHASE (NORMAL)

- 1) Input a PAL SP color bar.
- 2) Connect the probe of an oscilloscope to TP306.
- 3) Set the unit in the service mode.
- 4) Adjust PHASE PAL NOR so that the waveform of the B-Y anti-PAL signal will be "0."



*The signal waveform differs slightly every hour. Adjust it to "0."

Fig. 5-25 R-Y OUT

10-13. PAL PHASE (ACC OFF)

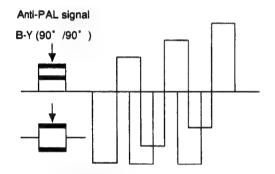
Note: 10-13, is not applicable to the group of models 3.

- 1) Conduct ACC OFF via MENU.
- 2) Adjust PHASE PALACC OFF in the same way as 10-12-4).

10-14. PAL B-Y PHASE

Note: Be sure to set ACC in the ON position before this adjustment.

- 1) Input a PAL SP color bar.
- 2) Connect the probe of an oscilloscope to TP305.
- 3) Set the unit in the service mode.
- Adjust B-Y PHASE PAL so that the waveform of the R-Y anti-PAL signal will be "0." (Fig.5-26)



*The signal waveform differs slightly every hour. Adjust it to "0."

Fig. 5-26 B-Y OUT

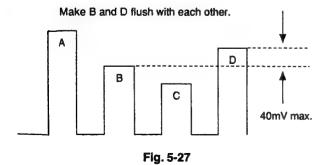
10-15. PAL CHROMA (NORMAL)

- 1) Input a PAL color bar.
- 2) Connect the probe of an oscilloscope to IC404 @ PIN or TP402.
- 3) Set the unit in the service mode.
- 4) Adjust CHROMA PAL NOR so that the peaks of waveforms will be flush with each other. (Fig.5-27)

10-16. PAL CHROMA (ACC OFF)

Note: 10-16, is not applicable to the group of model 3.

- 1) Conduct ACC OFF via MENU.
- 2) Adjust CHROMA PAL ACC OFF in the same way as 10-15-4). (Fig. 5-27)



10-17. PAL R-Y LEVEL

Note: Be sure to set ACC in the ON position before this adjustment.

- 1) Input a PAL color bar.
- 2) Connect the probe of an oscilloscope to IC404 @ PIN or TP401.
- 3) Set the unit in the service mode.
- 4) Adjust R-Y LEVEL PAL so that the peaks of waveforms will be flush with each other as shown on the right. (Fig. 5-28)

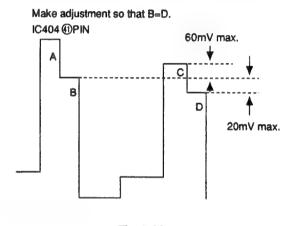


Fig. 5-28

11. SECAM adjustment

Note: Make adjustment after deflection adjustment.

Note: Subject to H-FREQ, H-BLK, VIDEO-PHASE, ANGLE,

BOW, H-DELAY, etc.

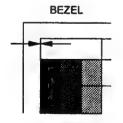
Note: 11. SECAM adjustment is not applicable to the group of models 3.

11-1. HP WIDTH (NORMAL) adjustment

1) Input a SECAM color bar.

Note: The board is roughly adjusted in 11-1., and IC317 1 PIN pulse width may be used for control.

- 2) Set the unit in the UNDER SCAN mode.
- 3) Set the unit in the service mode.
- Adjust HP WIDTH NOR so that the color section at the left edge of the upper portion of the screen is about to disappear. (Fig. 5-29)



Make adjustment so that colors are about to disappear.

Fig. 5-29

11-2. Writing HP.WIDTH (NORMAL) data

Note: Not applicable to groups of models 1, 2, 4, and 5.

- 1) Set the unit in the service mode.
- 2) Input 102 to HP.WIDTH (NOR).

11-3. HP POSITION adjustment

Note: 11-3. is not applicable to the group of models 3.

- 1) Input a SECAM color bar.
- 2) Set the HV-DL mode.
- 3) Set the unit in the service mode.
- 4) Adjust [HP POSITION] as shown in Fig.5-30.

Note: The same as 11-3. The phase relationship between the beginning of IC317 @ PIN pulse and the input VIDEO signal may be used for control.

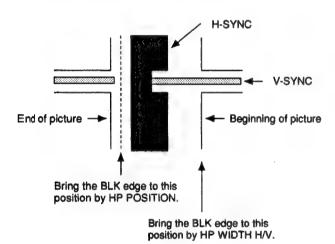


Fig. 5-30

11-4. HP WIDTH (H/V-DL) adjustment

Note: 11-4. is not applicable to the group of models 3.

- 1) Input a SECAM color bar.
- 2) Set the unit in the HV-DELAY mode.
- 3) Set the unit in the service mode.
- 4) Adjust [HP WIDTH H/V-DELAY] as shown in Fig.5-30. (Note: Check HP POSITION. If it is not in position, repeat 2) and 3).)

11-5. SECAM COL BALANCE

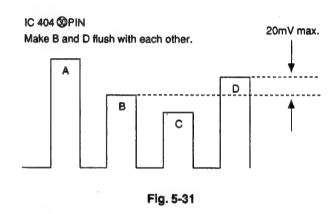
Note: 11-5. is not applicable to the group of models 3.

- 1) Input a SECAM color bar.
- 2) Connect the probe of an oscilloscope to TP306.
- 3) Set the unit in the service mode.
- Adjust <u>SECAM COLOR BALANCE R-Y</u> so that the level in the achromatic color will be straight.

- 5) Connect the probe of an oscilloscope to TP305.
- Adjust <u>SECAM COLOR BALANCE B-Y</u> so that the level in the achromatic color will be straight.

11-6. SECAM CHROMA

- 1) Input a SECAM color bar.
- 2) Connect the probe of an oscilloscope to IC404 **②** PIN or TP402.
- 3) Set the unit in the service mode.
- Adjust <u>CHROMA SECAM</u> so that the peaks of waveforms will be flush with each other as shown in Fig.5-31.



11-7. SECAM R-Y LEVEL

- 1) Input a SECAM color bar.
- 2) Connect the probe of an oscilloscope to IC404 @ PIN or TP401.
- 3) Set the unit in the service mode.
- 4) Adjust R-Y LEYEL SECAM so that the peaks of waveforms will be flush with each other as shown in Fig.5-32.

IC404 (PIN Make adjustment so that B=D.

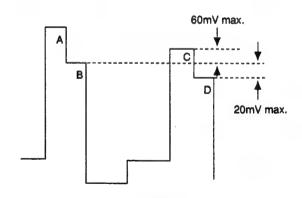


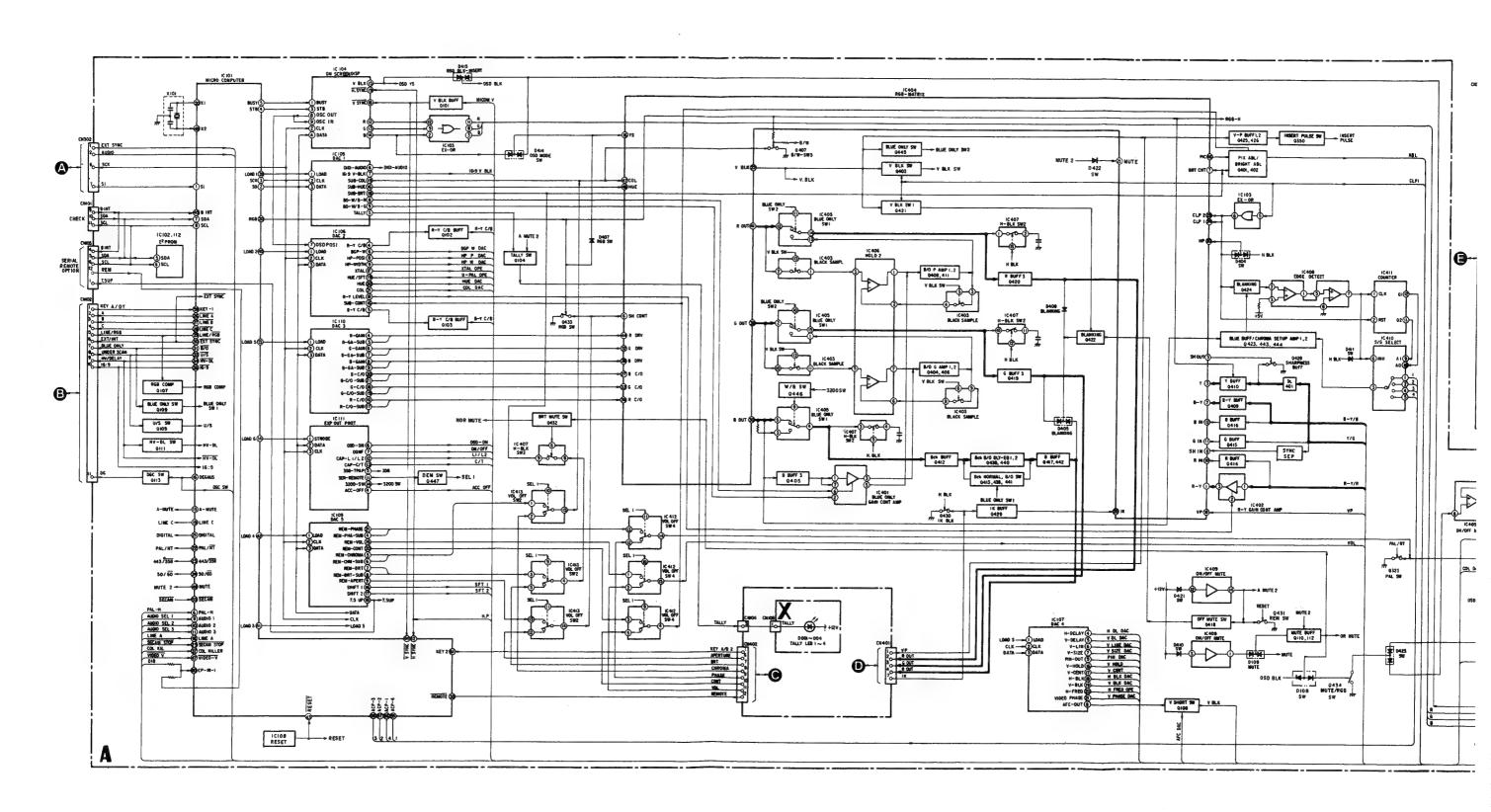
Fig. 5-32

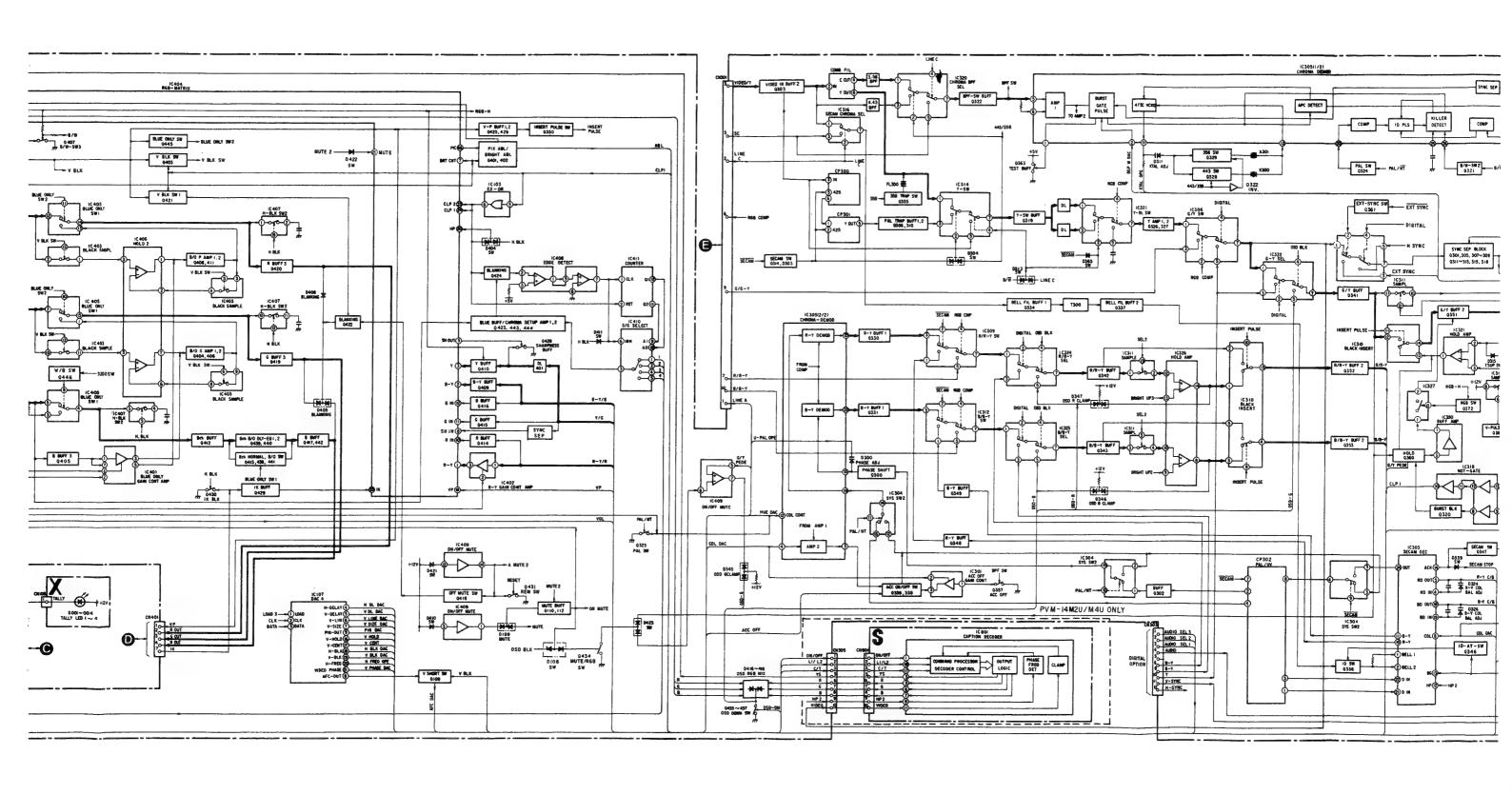
12. Writing adjustment results

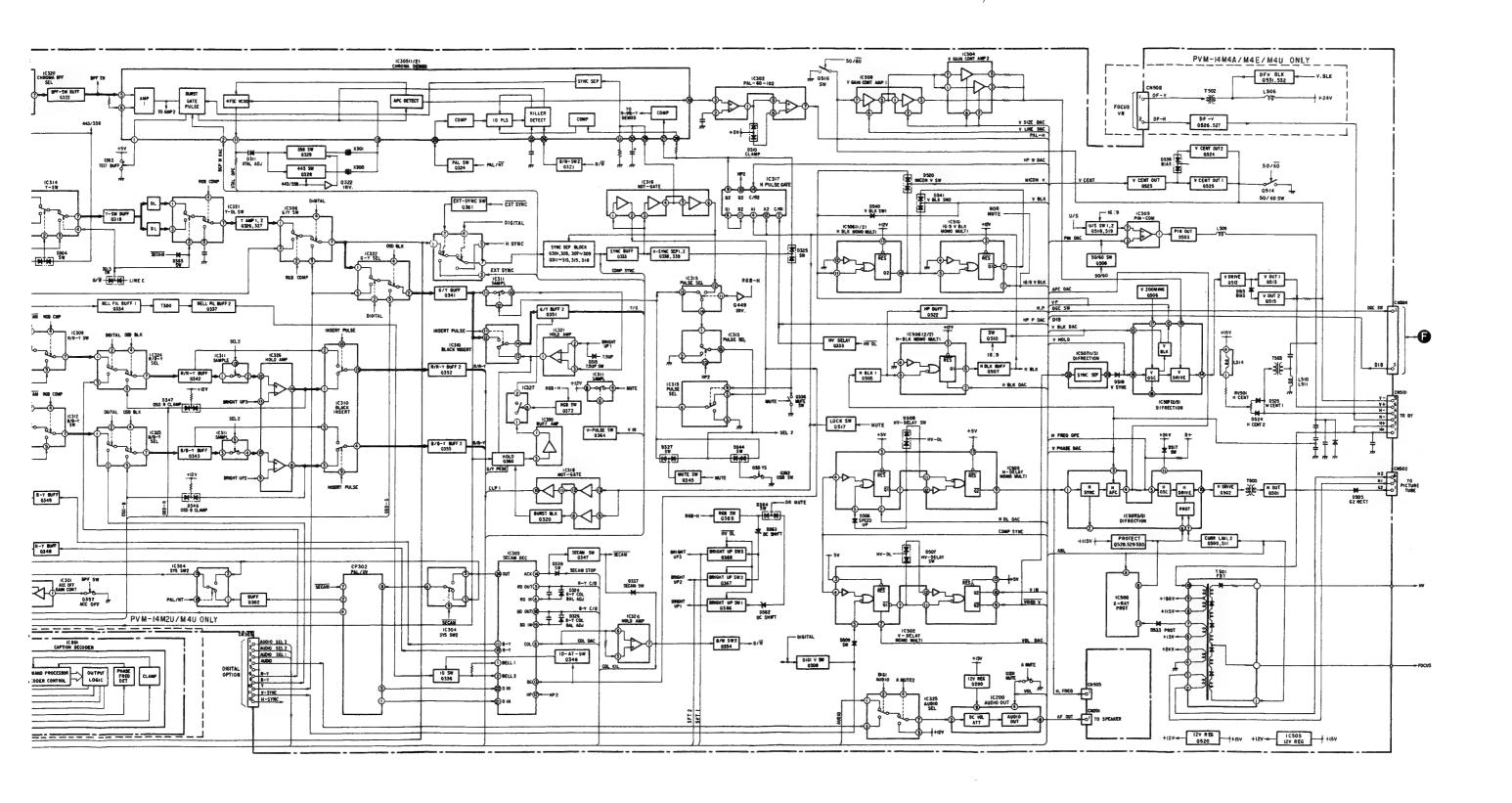
Write adjustment results in the memory.

SECTION 6 DIAGRAMS

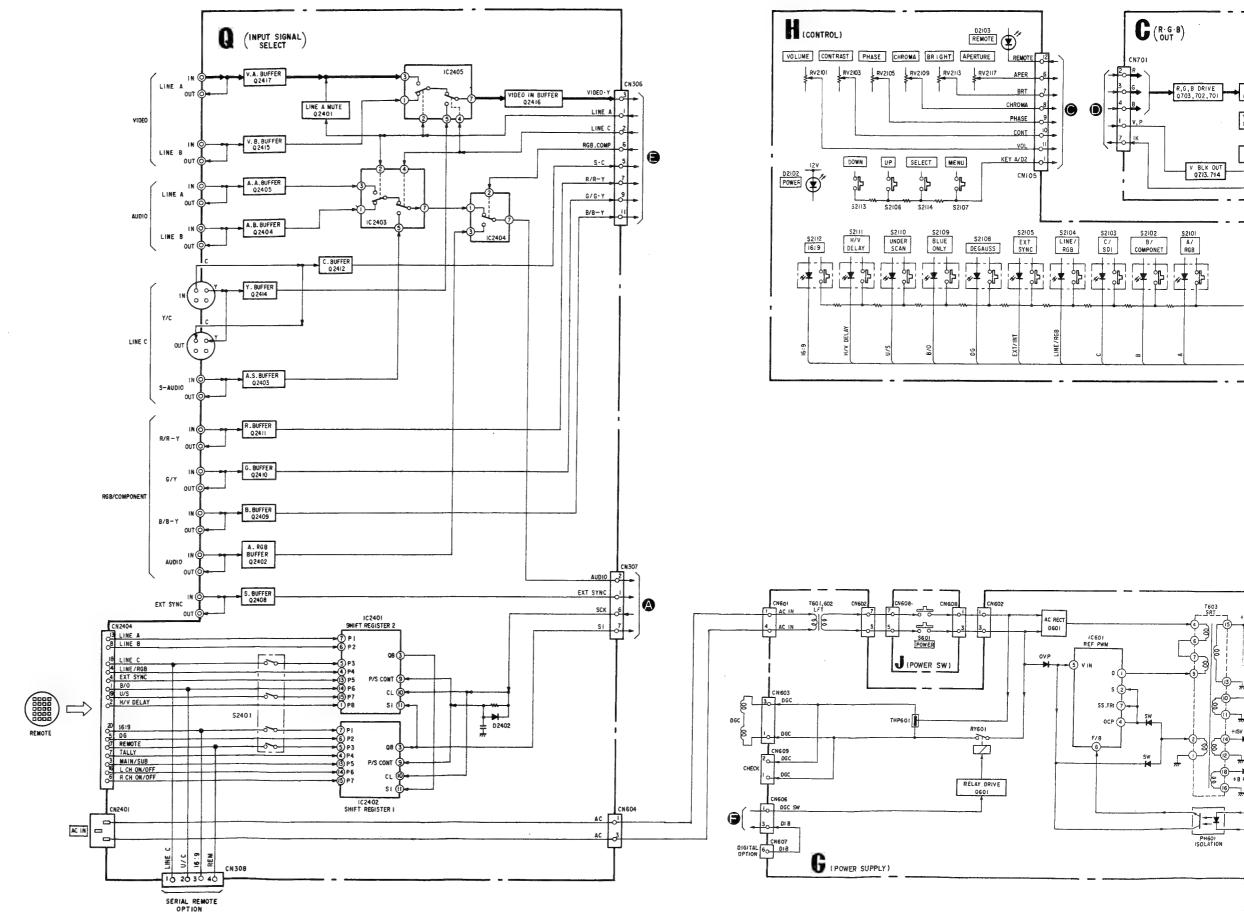
6-1. BLOCK DIAGRAMS (1)

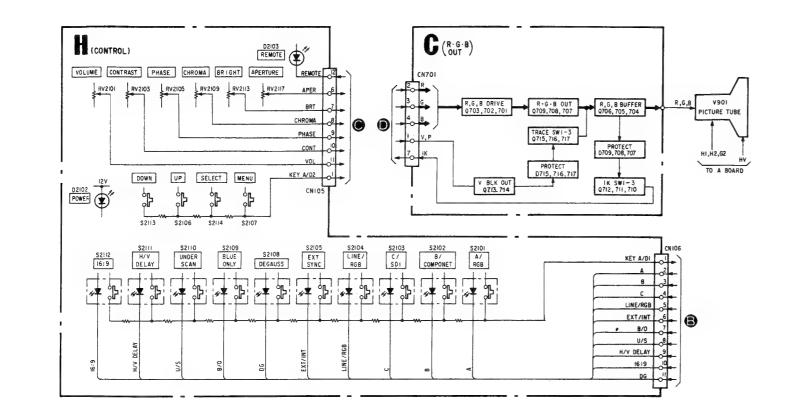


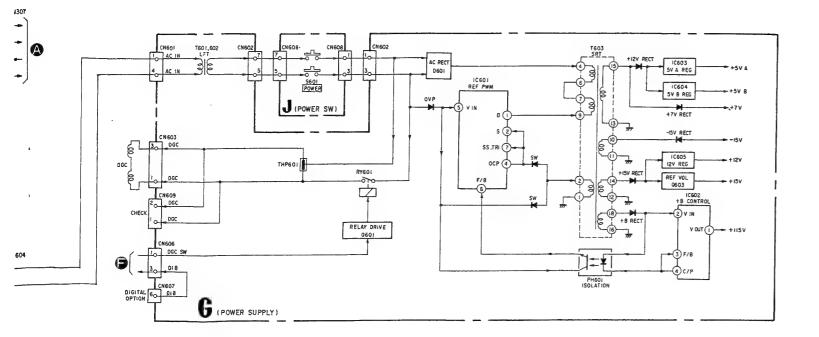




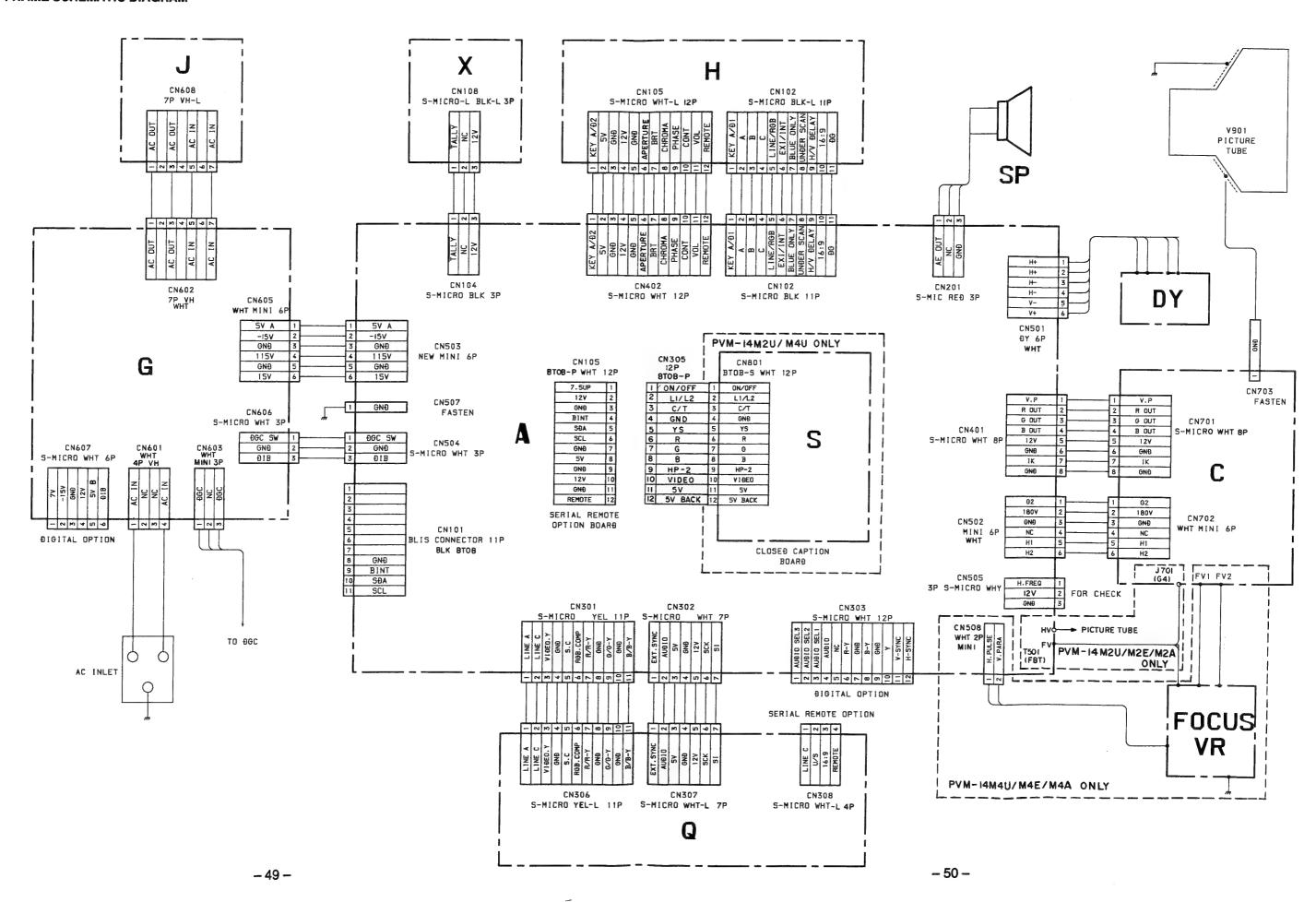
BLOCK DIAGRAMS (2)

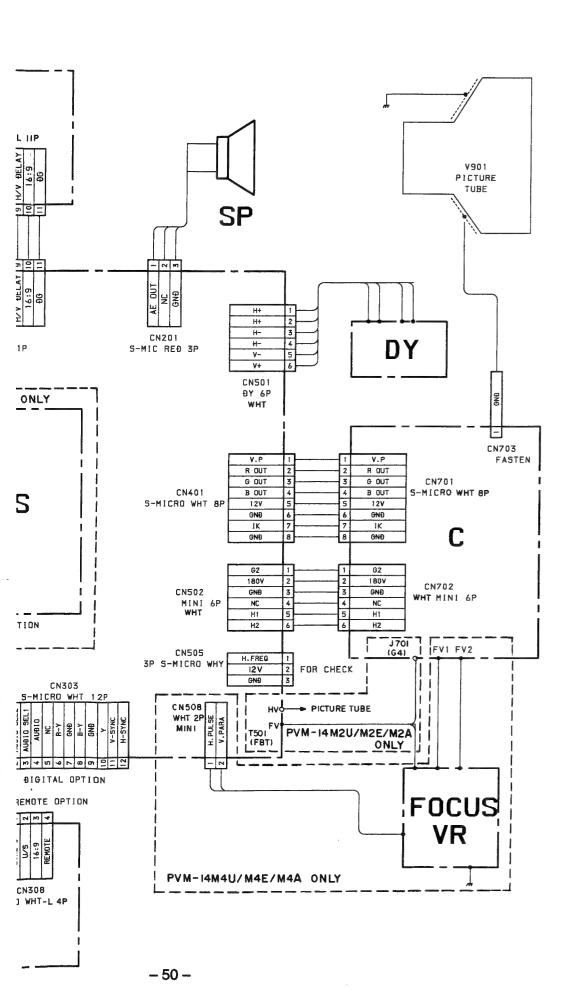


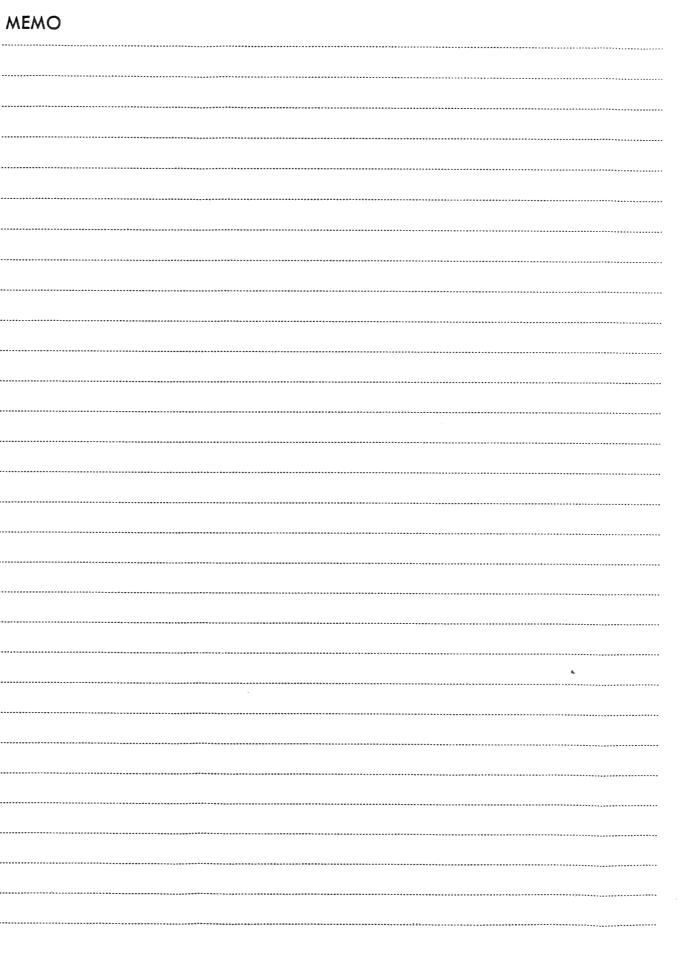




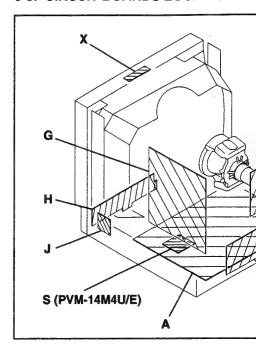
6-2. FRAME SCHEMATIC DIAGRAM







6-3. CIRCUIT BOARDS LOCATION



6-4. PRINTED WIRING BOARDS AND S

Note:

- All capacitors are in µF unless otherwise noted.
 50 WV or less are not indicated except for electrolytics

Pitch: 5 mm Rating electrical power 1/4 W

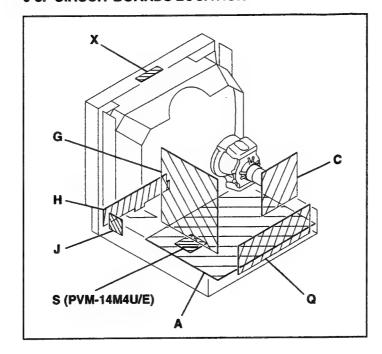
- All resistors are in ohms.
- : nonflammable resistor.
- fusible resistor.
- 🛆 : internal component.
- panel designation, and adjustment for repair.
 All variable and adjustable resistors have characterist
- The components identified by in this basic so diagram have been carefully factory-selected for each
- order to satisfy regulations regarding X-ray radiation.

 Should replacement be required, replace only with the originally used.

 When replacing components identified by , ma
- necessary adjustments indicated. If results do not me specified value, change the component identified by repeat the adjustment until the specified value is accepted to R1536 adjust on Page 25 and 26.)
- When replacing the part in below table, be sure to perform related adjustment.

Part replaced ()	Α
C512, C513, C523, C549, C592, D501, D533, IC500, IC507, Q500, Q511, R506, R508, R515, R516, R517, R518, R519, R551, R1537, R1560	(}

6-3. CIRCUIT BOARDS LOCATION



6-4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics.
- · Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm Rating electrical power 1/4 W

- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- : internal component. Δ
- : panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ullet The components identified by $lackbox{H}$ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- · When replacing components identified by ... make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by 🖪 and repeat the adjustment until the specified value is achieved. (Refer to R1536 adjust on Page 25 and 26.)
- · When replacing the part in below table, be sure to perform the related adjustment.

Part replaced (2)

C512, C513, C523, C549, C592, D501, D533, IC500, IC507, Q500, Q511, R506,

R508, R515, R516, R517, R518, R519,

R551, R1537, R1560----- (A BOARD)

- All voltages are in V.
- Voltage are dc with respect to ground unless otherwise noted.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- : B + bus.
- == : B bus.
- : signal path.
- No mark ; with PAL colour-bar signal sreceived or common voltage.
- For the respective voltage ratings in SECAM, NTSC 3.58, NTSC 4.43 S-VIDEO, and ANALOG RGB modes, see the table

Reference information

scnematic	RESISTOR	: RN	METAL FILM
ach set in		: RC	SOLID
		: FPRD	NONFLAMMABLE CARBON
the value	the value		NONFLAMMABLE FUSIBLE
		: RW	NONFLAMMABLE WIREWOUN
make the		: RS	NONFLAMMABLE METAL OXI
t meet the		: RB	NONFLAMMABLE CEMENT
by 🖪 and	COIL	: LF-8L	MICRO INDUCTOR
achiéved.	CAPACITOR	: TA	TANTALUM
erform the		: PS	STYROL
		: PP	POLYPROPYLENE
		: PT	MYLAR
A .I'		: MPS	METALIZED POLYESTER
Adjustment (M)		: MPP	METALIZED POLYPROPYLENE
		: ALB	BIPOLAR
R1536		: ALT	HIGH TEMPERATURE
(HOLD-DOW	/N)	: ALR	HIGH RIPPLE

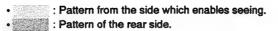
Note: The components identified by shading and mark A are critical for safety. Replace only with part number specified.

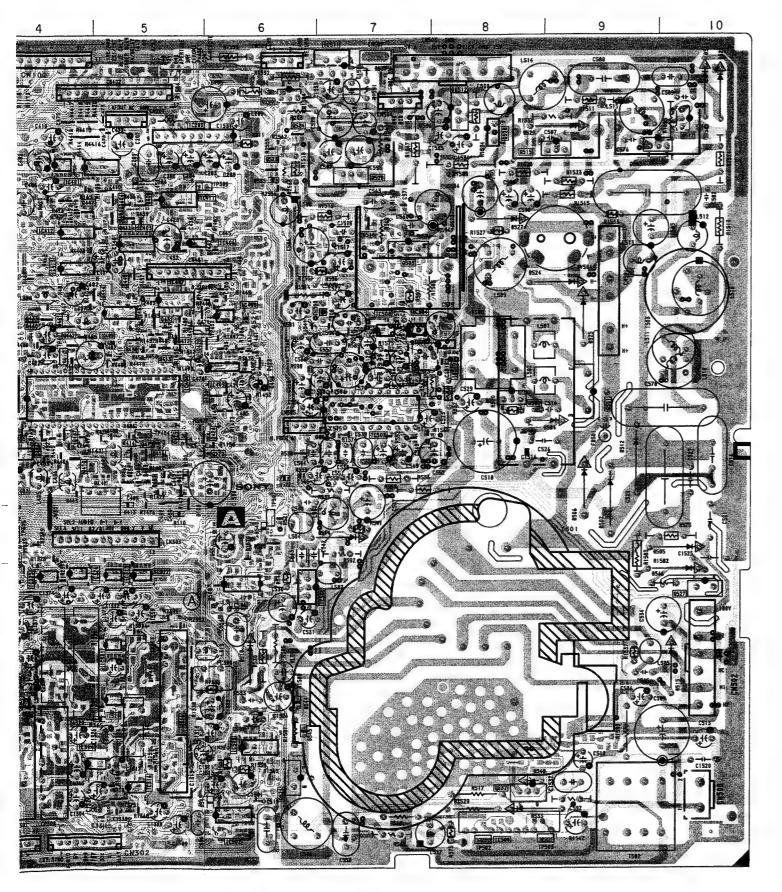
Note: Les composants identifiés par une trame et par une marque A sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

A BOARD (COMPONENT SIDE)

·	T
IC Q108 C-2 Q109 A-3 Q110 A-1	Q527 E-10 Q528 A-8 Q532 G-8
IC101 B-2 Q112 D-6 IC102 B-2 Q200 A-6 IC103 C-1 Q300 G-3	DIODE
C104 B-2 C308 G-3 C105 B-3 C311 G-3 C314 F-4 C316 F-5 C320 C-3 C314 F-4 C316 F-5 C320 C-3 C324 G-1 C110 C-3 C324 G-1 C111 B-2 C335 D-1 C112 B-2 C335 D-1 C301 G-2 C342 E-3 C302 G-3 C302 G-3 C303 E-1 C303 E-1 C304 G-1 C304 G-1 C304 E-2 C305 G-2 C306 F-3 C309 F-3 C309 F-3 C311 E-3 C311 E-3 C312 E-3 C312 E-3 C312 E-3 C314 G-4 C315 D-2 C316 G-5 C312 E-3 C316 G-5 C317 D-1 C315 D-2 C316 G-5 C312 E-5 C317 D-1 C322 E-5 C322 E-5 C322 E-5 C322 E-5 C322 E-5 C322 E-5 C322 E-4 C325 E-2 C401 B-4 C402 D-4 C402 D-4 C402 D-4 C404 D-5 C404 D-5 C404 D-5 C406 B-5 C406 B-5 C407 C-5 C408 C-6 C409 C-6 C400 C-7 C500 C-8 C500 C-9 C500 C-8 C500 C-9 C50	D100 D-5 D104 B-1 D105 B-1 D106 B-4 D108 E-5 D109 A-1 D110 E-5 D1112 A-1 D1114 F-2 D300 G-2 D301 D-2 D305 G-3 D308 F-2 D313 G-5 D314 C-1 D327 D-3 D332 È-3 D335 F-1 D336 F-1 D336 F-1 D338 E-3 D335 F-1 D336 C-3 D362 C-2 D360 C-3 D361 C-3 D362 C-2 D365 G-4 D381 D-2 D406 C-1 D413 E-5 D416 D-4 D417 D-4 D418 D-4 D415 D-5 D416 D-4 D417 D-4 D418 D-4 D417 D-4 D418 D-4 D418 D-5 D502 E-9 D504 D-9 D505 E-10 D506 D-9 D510 F-6 D522 D-6 D524 C-8 D525 C-9 D527 B-8 D526 C-9 D527 B-8 D527 B-8 D528 A-10 D529 A-8 D530 A-10 D530 G-6 D541 F-3 D543 G-6 D541 F-3 D543 G-6 D544 F-6 D545 G-6 D546 E-10 D548 G-8 VARIABLE RESISTOR
Q107 A-3 Q526 G-6	RV501 B-9

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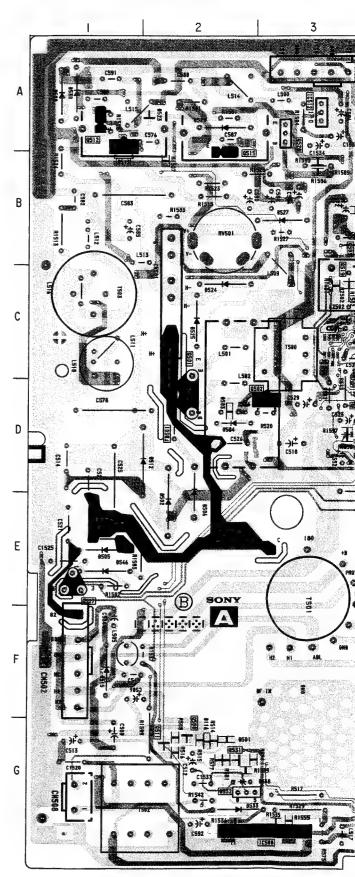




A BOARD (CONDUCTOR SIDE)

Q401 Q402 Q403	Q368 Q369 Q375	Q336 Q338 Q339 Q345 Q349 Q350 Q351 Q352 Q355 Q361 Q363 Q364 Q367	Q333 Q334	Q101 Q111 Q111 Q113 Q114 Q200 Q201 Q301 Q302 Q303 Q305 Q306 Q307 Q309 Q310 Q312 Q313 Q315 Q318 Q319 Q321 Q322 Q323 Q325 Q326 Q327 Q328 Q328 Q329 Q330 Q331 Q332	IC101 IC108 IC200 IC303 IC404 IC500 IC505 IC507 IC511 IC512	IC
B-6 B-6 B-6	E-8 E-8 D-8	10 10 10 10 10 10 10 10 10 10 10 10 10 1	D-9 F-9	STOR 9 10 7 8 5 5 8 10 6 8 7 8 8 7 8 8 8 7 7 8 6 10 8 6 6 9 9 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10	A-9 B-8 A-5 E-9 D-6 G-3 E-4 D-4 A-4 A-3	
D315 D317 D320	D309 D310 D311	D101 D102 D103 D107 D111 D115 D116 D200 D301 D303 D304 D307	DIO	Q434 Q439 Q444 Q448 Q500 Q501 Q502 Q503 Q505 Q506 Q507 Q508 Q509 Q511 Q512 Q513 Q514 Q515 Q516 Q517 Q519 Q520 Q522 Q525 Q526 Q527 Q528 Q529 Q530 Q531 Q532 Q2501	Q409 Q417 Q418 Q419 Q420 Q421 Q422 Q423 Q423 Q424 Q428 Q431	Q405 Q407
E-8 D-9 D-9	G-8 G-8 G-9	B-10 B-9 B-9 B-9 B-9 B-9 G-2 A-4 G-7 G-8 F-7		56692222644545471142555BW46H472455555555555555555555555555555555555	7 5 5 6 6 5 5 5 5 6 5 0 0 8 0 0 8 8 0 0 0 8 8	C-6 C-7
RV501	VARIA RESIS	D527 D528 D529 D530 D531 D532 D533 D534 D536 D542 D546 D547 D548	D525 D526	D401 D402 D404 D405 D407 D410 D411 D421 D422 D425 D427 D500 D501 D502 D503 D504 D505 D506 D507 D508 D509 D511 D512 D513 D514 D515 D516 D517 D518 D516 D517 D518 D519 D523 D524	D324 D325 D326 D333 D337 D344 D345 D346 D363 D363	D322 D323
B-2		B 1 2 1 4 4 2 8 4 5 4 1 4 2 B A B E D G	C-2 B-4	##P#P\$	E-9 D-8 D-9 E-9 E-7 E-7 E-7 E-8 E-8	D-9 C-9

-A BOARD- <Conductor Side>



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9

NOTE:

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

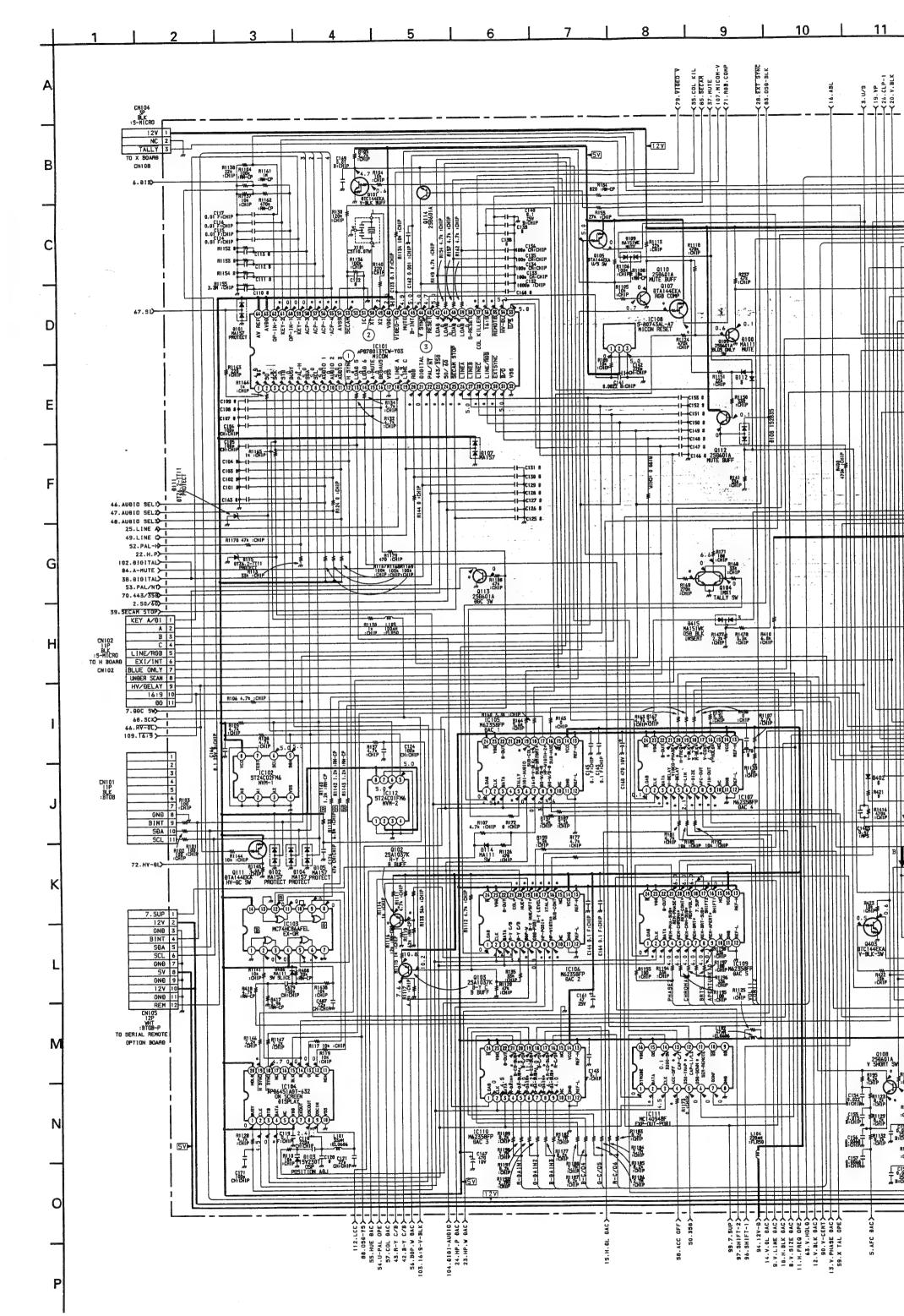
• : Pattern from the side which enables seeing.

· Pattern of the rear side.

A BOARD (CONDUCTOR SIDE)

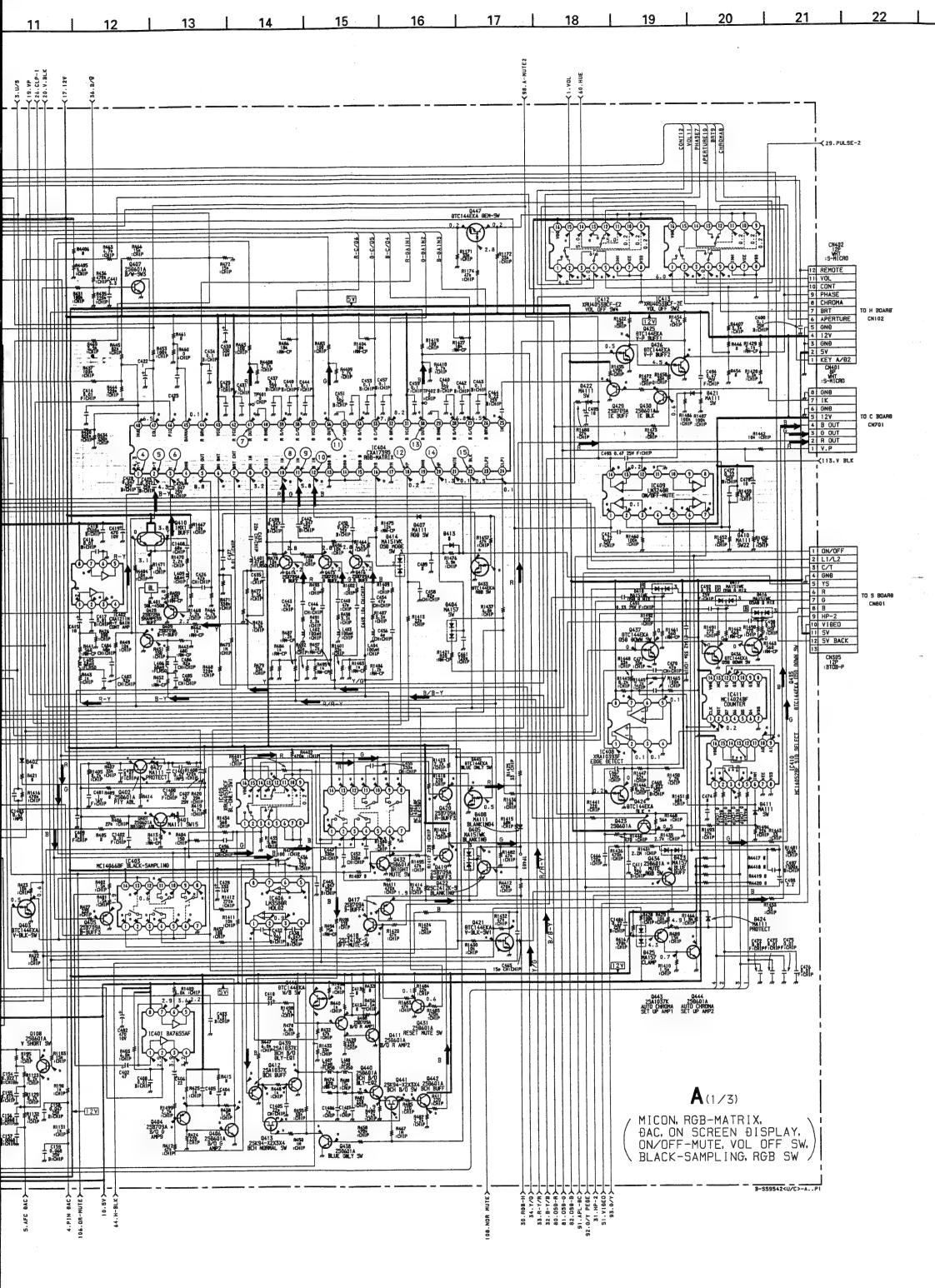
(CONDUCTOR S	DE)	
IC IC101 A-9 IC108 B-8 IC200 A-5 IC303 E-9 IC404 D-6 IC500 G-3 IC505 E-4 IC507 D-4 IC511 A-4 IC512 A-3 TRANSISTOR Q101 A-9 Q111 C-10 Q113 A-7 Q114 A-8 Q200 A-5 Q201 A-5 Q301 G-8 Q302 G-10 Q303 G-6 Q305 G-8 Q306 G-7 Q307 G-8 Q309 G-8 Q309 G-8 Q309 G-8 Q309 G-8 Q310 G-7 Q312 G-8 Q310 G-7 Q312 G-8 Q313 G-8 Q310 G-7 Q312 G-8 Q313 G-8 Q315 G-8 Q319 F-7 Q312 G-8 Q315 G-9 Q315 F-9 Q321 G-8 Q322 G-6 Q323 G-10 Q325 F-8 Q326 F-6 Q327 F-6 Q328 G-9 Q329 G-9 Q330 F-9 Q330 F-9 Q331 F-9 Q331 F-9 Q331 F-9 Q332 G-10 Q333 D-9 Q334 F-9 Q335 F-8 Q345 D-8 Q345 D-8 Q345 D-8 Q355 D-8 Q355 D-8 Q355 D-8	Q405 C-6 Q407 C-7 Q409 D-7 Q417 C-5 Q418 B-5 Q419 C-6 Q421 B-5 Q422 B-5 Q423 C-5 Q424 C-5 Q428 D-6 Q431 B-5 Q434 C-5 Q428 D-6 Q431 B-5 Q434 C-5 Q428 D-6 Q431 B-5 Q434 C-5 Q428 D-6 Q431 B-5 Q430 C-6 Q431 B-5 Q431 C-5 Q428 D-6 Q431 B-7 Q439 C-6 Q431 B-7 Q439 C-6 Q444 B-9 Q500 G-2 Q501 D-2 Q502 D-3 Q503 B-3 Q505 E-5 Q506 B-4 Q507 E-5 Q508 C-4 Q509 G-5 Q509 G-5 Q510 C-4 Q511 G-2 Q512 A-1 Q514 B-4 Q515 B-2 Q516 C-4 Q517 C-4 Q517 C-4 Q519 C-3 Q520 B-4 Q521 B-4 Q525 A-4 Q525 G-4 Q527 E-1 Q528 A-3 Q529 D-3 Q530 D-4 Q531 G-2 Q531 G-2 Q532 G-2 Q532 G-2 Q531 G-2 Q532 G-2 Q5501 C-4 DIODE D101 B-10 D102 B-9 D103 B-9 D103 B-9 D107 B-9 D115 B-9 D116 G-2 D200 A-4	D322 D-9 D323 C-9 D324 E-9 D325 D-8 D326 E-9 D337 E-8 D347 D-8 D347 E-7 D346 E-7 D346 E-7 D346 E-7 D347 E-7 D346 E-8 D347 D-7 D402 B-7 D402 B-7 D404 D-6 D405 B-5 D407 D-7 D411 B-6 D421 C-5 D422 C-5 D427 B-6 D500 G-5 D427 B-6 D500 G-5 D501 G-2 D502 E-2 D503 D-2 D504 D-2 D505 E-1 D506 E-2 D507 G-5 D508 F-5 D509 G-5 D511 E-5 D510 F-5 D511 E-5 D511 E-5 D512 D-2 D503 D-2 D504 D-2 D505 E-1 D506 E-2 D507 G-5 D508 F-5 D510 F-5 D511 E-5 D511 E-5 D512 D-2 D505 E-1 D506 E-2 D507 G-5 D518 E-5 D510 F-5 D511 E-5 D512 D-2 D503 A-2 D504 D-2 D505 B-1 D506 E-2 D507 G-5 D508 F-5 D510 F-5 D511 E-5 D511 E-5 D512 B-4 D513 B-4 D515 F-1 D516 F-5 D517 E-4 D518 E-5 D519 C-4 D523 A-2 D524 C-2 D525 C-2 D526 B-4 D527 B-3 D528 A-1 D530 A-1 D531 B-4 D531 B-4 D533 G-2 D534 B-4 D536 R-5
Q350 D-8 Q351 D-8 Q352 D-8	D107 B-9 D111 B-9 D115 B-9 D116 G-2 D200 A-4 D301 G-8 D303 F-7 D304 G-7 D307 G-8 D309 G-8 D310 G-8 D311 G-9	D532 B-4 D533 G-2 D534 B-4 D536 A-5 D542 B-4 D546 E-1 D547 D-4 D548 G-2 VARIABLE RESISTOR
Q402 B-6 Q403 B-6	D315 E-8 D317 D-9 D320 D-9	RV501 B-2

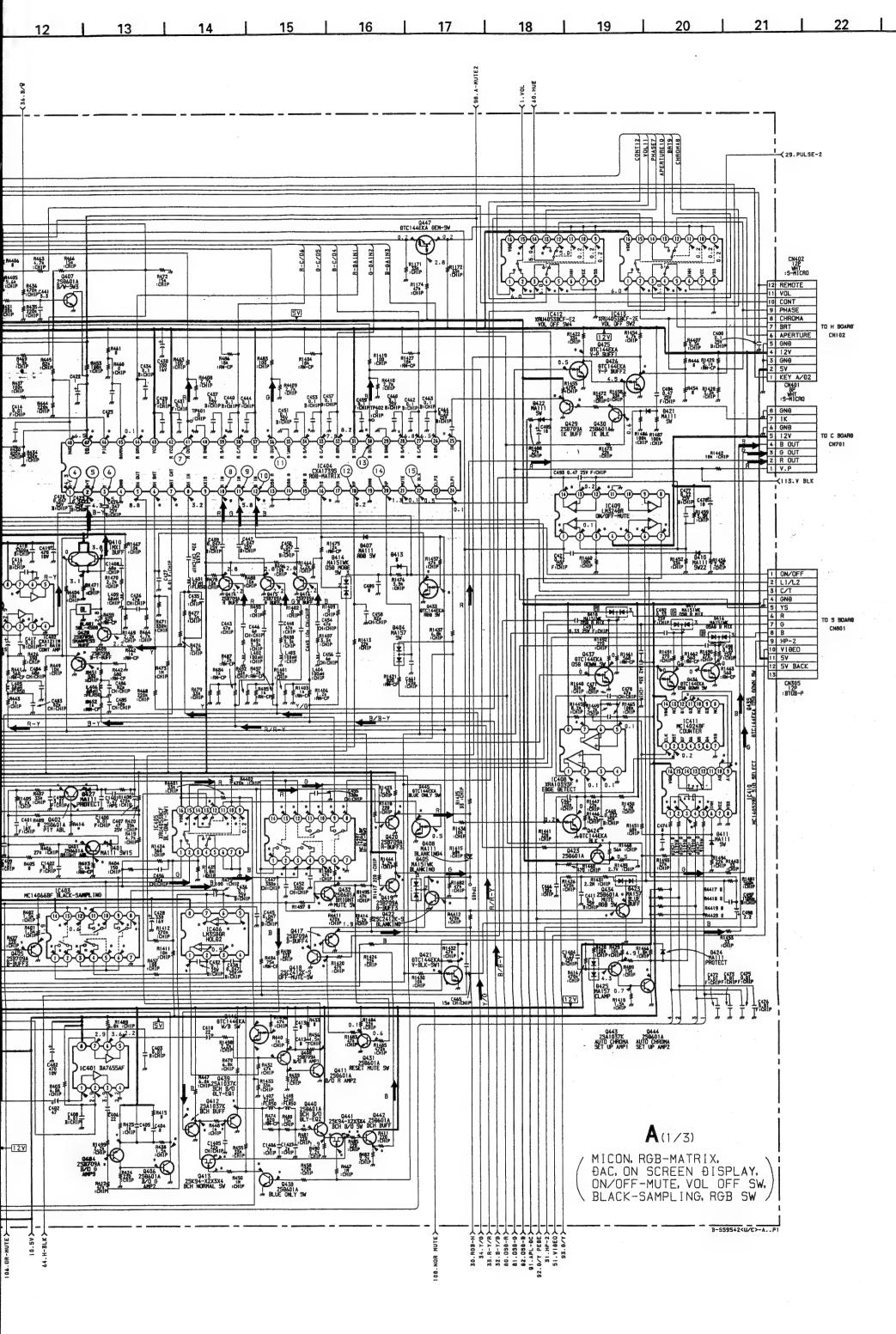
-A BOARD- <Conductor Side>



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·A BOARD WAVEF	ORMS	
1 4.3 Vp-p(H)	2 5.6 Vp-p (10MHz)	3 4.8 Vp-p (V)
PAL 0.3 Vp-p (H) SECAM 0.32 Vp-p (H)	NTSC3.58. 4.43 0.28 Vp-p (H) 5-V1000 0.35 Vp-p (H)	5 -2-11/2-11/2-1 0.45 Vp-p (H)
5 -24 ML24 ML24 NTSC3.59 0.42 Vp-p (H) NTSC4.43 0.38 Vp-p (H)	5 -~M/V~M/V~~ 5-710E0 0.45 Vp-p (H)	6 7 0.57 Vp-p (H) SECAN 0.45 Vp-p (H)
6 -4-10-4-10-4 NTSC3.58 4.43 0.4 Vp-p (H) S-V10E0 0.52 Vp-p (H)	2.4 Vp-p(H) secan 2.3 Vp-p(H)	7 TTTT H NTSC3.58 2.1 Vp-p (H) NTSC4.43 2.2 Vp-p (H)
3-V1060 2 . 4 Vp-p (H)	7 	® WWW WWW MALOO EOB p - p (H)
AMALOS POB 0.5 Vp-p (H)	10 ANALOG POB 0.6 Vp-p (H)	PAL 2.6 Vp-p (H) SECAM 2.5 Vp-p (H)
MTSC3.58 Vp-p (H) MTSC4.25 Vp-p (H)	3-V10E0 2.4 Vp-p (H)	1) AMALOO RGB 3.0 Vp-p(H)
(2) 4.6 Vp-p (V)	PAL 1.8 Vp-p (H) SECAM 1.9 Vp-p (H)	NTSC3.58 Vp-p(H) NTSC4.68 Vp-p(H)
(3) 1-71,0-10,0 1-71,0 1-7	(3) ANALDO RGB 2.4 Vp-p (H)	3.7 Vp-p(H)
3.6 Vp-p (V)		

A BOARD (1/3) * MARK LIST

	PVM-14M4U/E/A	PVM-14M2U/E/A
CN305	13P : BTOB-P	12P : BTOB-P
R407	33k : CHIP	15 :CHIP
R414	#	3k : CHIP

A BOARD (1/3) * MARK

1 507	ן) שח	/3) +	MARK			
	PAL	SECAM	NTSC 3.58	NTSC 4.43	S-VIDEO	ANALOG RGB
3	2.3 4.5	2.4 4.6	2.2 4.5	2.2 4.4	2.0 4.4	2.3 4.5
(B)	4.1 3.4	3.4 3.5	3.5	0.1 3.5	3.1	3.5
(3)	0	0	0	0	4.8	0 4.9
70	4.9	5.0	0	0	0	0
3	5.0 5.0	5.0	0	5.0 0	0	0
⊘	0.1	5.0	0.1	0.1	4.9	0.1
3	5.0 5.0	5.0 5.0	5.0 5.0	5.0 5.0	0 4.9	5.0 0.1
39	5.0	5.0	5.0	5.0	5.0	0.1 3.9
(S)	4.0	4.0	4.6 4.6	5.0 5.0	3.9 3.6	3.7
9	0.3 4.2	0.1	0.1 4.3	4.2	0.1 4.2	0.1 4.3
S	4.0 0.5	3.4 0.9	3.6 1.0	3.7 0.8	3.9	4.0 1.9
9	3.0	2.5	2.6	2.3-	3.8	2.2
9	3.6 4.0	3.0 4.0	2.9 4.0	3.2 4.0	3.9 2.9	4.0
C103 (6)	2.3	2.3	2.2	0.2 2.2	2.0	2.3
09	3.5 2.3	3.5 2.3	3.5 2.2	3.5 2.2	3.1 0	3.5 2.3
•	0	0.1	0.1	0 2.6	11.8	0 2.6
(9)	2.6 5.4	5.4	5.4	5.4	6.6	8.1
C106 (D)	2.3 5.4	2.3 5.4	2.2 5.4	2.2 5.4	4.1	2.3 5.4
Ø	7.8	7.8	7.8	7.7	0.6 5.5	7.8
9	5.1	5.1 10.5	5.1 10.5	5.1 10.5	4.0	5.1 10.5
0	3.1	3.1	2.6	3.1	2.7	2.5
(8)	6.3	6.3	11.9	9.0	10.7	3.2
30	3.6 0.8	3.6 1.8	4.8 0.4	3.6 0.3	4.3 2.4	9.5 3.1
C107 ②	4.6· 2.3	4.5 ; 2.3	4.5 2.2	4.5	4.4 2.1	4.5
3	2.8	2.8	2.8	2.8	3.3	2.8
0	2.9	2.9	2.9	2.9	2.1	2.9
(D)	2.6 2.9	2.6	2.6	2.6	2.9	2.6 2.9
(b)	2.6 3.2	2.6 3.2	2.8 5.4	2.8 5.4	2.8 5.3	2.8 5.4
39	4.5 6.3	4.6 6.3	5.0 6.1	5.0 6.1	3.7 6.0	5.0 6.1
C109 ②	4.6	4.5	4.5	4.5	4.4	4.4
<u> </u>	11.9	2.3 11.9	11.9	11.9	11.9	2.3 0.1
(B) C110 (3)	11.9	11.9	0.1 2.2	2.2	2.0	11.8
④	7.2 5.8	7.2 5.8	7.2 5.8	7.2 5.8	8.3 6.2	7.2 5.8
(D)	11.9	11.9	11.9	11.9	7.8	11.9
1	3.7	7.9 3.7	7.9 3.5	7.9 3.5	7.8 3.5	7.9 3.6
C111 (4)	0.3	0.3	0.3	0.3	0.1	0.3
0	0 5.0	5.0 5.0	5.0 5.0	5.0 5.0	0	5.0 5.0
C402 ②	3.1	3.9	2.9	3.0	3.0	3.6
③	2.9	2.3	2.9	0	2.2	2.2 2.9
C403 ①	0.8	1.2	0.8	0.8	1.2	0.9
<u> </u>	0.8	0.8	0.9	0.9	0.8	1.4
(5) (6)	0.6 0.5	0.5	0.6	0.6	0.6	0.6
(8)	1.0	1.0	1.0	1.0	0.8	1.1
9	1.6	1.5	1.1	1.1	1.4	1.6
0	0.9	0.6	0.6	0.6	0.8	0.6
C404 ®	3.0 4.9	3.0 4.9	3.0 4.9	3.0 4.9	4.5 4.7	6.1
0	5.6	5.6	5.6	5.6	5.6	5.8
10	5.6 0	5.6 0.1	5.6	5.6	5.6	5.8 4.4
3	3.8 7.1	4.0 6.6	8.0	4.2 8.0	7.7	3.6 7.9
39	1.4 7.0	1.3 7.3	8.1	1.1 7.8	1.2 7.8	1.4 7.8
⊗	1.4	1.3	1.2	1.1	1.2	1.5
39	7.8 6.9	7.8	7.7	7.8	8.0 7.6	7.7
49	1.2 7.2	1.2 7.2	7.2	1.0 7.2	1.2 8.3	1.3 7.2
®	7.2 6.6	7.2 6.6	7.2 6.6	7.2 6.6	6.9 5.5	7.0
C405 ①	1.6	1.5	1.1	1.3	1.4	1.6
3	1.4	1.4	0.9	0	1.2	1.5
(4)	1.4	1.3	1.0	0	1.2	1,4
0	0.5 0.5	0.5	0.6	1.0	0.3	0.2
0	1.2	1.2	0.8	1.1	1.2	1.3
9	1.2	1.2	0.8	1.2	1.2	1.3
C406 ①	4.8	5.1	4.8	4.8	4.8	5.1
3	1.0	0.9	1.0	1.0	0.8	1.0
© ⑦	5.1	1.0 5.1	1,1	1.1	0.8 4.9	1,1 5.1
C407 ①	0.4	1.2	0.9	0.3	0.4	0.5
3	1.4	1.3	1.0	1.3	1.2	1.4
<u> </u>	0.6 2.0	1.8	2.0	0.5 2.0	0.5 2.0	0.7 2.0
6	11.7 5.5	10.7	11.6	11.3	11.7	11.2
9	5.5	5.5	5.5	5.5	5.4	8.4
0	0.6	-0.1	0.7	0.6	0.5	1.5 0.6
0	2.0 2.0	1.7	2.0	2.0	2.0	2.0
C408 ①	3.1	2.9	2.9	3.1	3.7	3.4
•	0	8.8	9.0	9.4	0	7.5
			0.4	0.3	0.3	1.6
(3) (5)	5.9	0.8 5.9	6.3	0	5.9	5.9
(3)						

IC410 ① ② ③						
②	20	4.0	4.0	4.0	0	3.9
	3.8					
(4)	3.0	3.1	2.4	3.1	0	4.0
	1.3	0.7	1.4	1.6	2.3	1.5
(4)	3.5	3.6	3.0	3.8	3.9	3.9
(5)	0.6	1.3	1.1	1.1	3.1	1.7
6	4.0			3.9	0	0
		4.0	4.0			
②	0	2.0	1.9	1.8	2.5	1.4
0	2.0	2.3	2.3	2.0	1.8	3.0
IC411 ①	4.1	4.0	3.9	3.8	4.2	4.1
0	1.8	2.0	1.9	1.8	2.5	1.3
0	2.0	2.3	2.3	2.1	1.8	3.0
IC412 ②	0.4	0.5	0.4	0.4	5.9	0.6
•	8.9	8.9	8.9	8.9	8.9	8.3
(5)	9.0	8.9	9.0	8.9	8.9	8.3
0	6.0	6.0	1 6.0	6.0	6.0	0
(3)	0.4	0.5	0.4	0.4	5.9	0.5
IC413 ②	7.9	8.0	8.0	8.0	0	6.9
(1)	0	5.5	5.5	5.5	5.4	0
(3)	5.5	5.5	5.5	5.5	5.4	8.6
1	3.1	3.1		3.1	0	5.1
			3.1			
100	3.1	3.1	3.1	3.1	6.0	5.1
(3)	7.9	7.9	8.0	7.9	6.3	6.9
Q102 B	10.9	10.9	10.9	10.9	10.7	10.9
C	8.1	8.1	8.1	8.1	0	8.1
E	11.5	11.5	11.5	11.5	11.3	11.5
Q104-1 B	- 0.2	0	- 0.2	0	0	- 0.2
Q107 B	5.0	5.0	5.0	5.0	5.0	0.1
С	0	0	0	0	0	5.0
Q108 C	2.6	2.6	2.6	2.6	2.9	2.6
Ε	2.6	2.6	2.6	2.6	2.9	2.6
Q111 B	5.0	5.0	0	0	4.9	4.9
С	0.4	0.4	0	0	0.4	0.4
Q113 C	4.1	4.3	4.2	4.2	3.8	4.0
						$\overline{}$
Q401 B	1.1	0.8	1.5	1.6	1.2	1.0
С	7.5	5.5	6.0	5.2	8.4	10.0
E	1.4	1.6	3.2	3.4	3.1	1.0
Q402 B	0.5	0.5	0.5	0.5	2.4	0.5
С	9.5	7.7	8.1	7.4	10.4	6.9
E	1.4	1.6	3.2	3.3	3.2	1.0
Q404 B	5.3	4.1	4.9	5.2	5.3	5.2
E	6.1	6.3	6.0	6.1	6.1	6.2
Q405 8	1.3	1.3	1.2	1.1	1.2	1.4
	0.7			0.7		
Q406 B		0.7	0		0.7	0.7
C	1.6	1.5	1.0	1.5	1.4	1.6
Q407 B	0	0	0	0	0	0.6
С	6.6	6.6	6.6	6.6	5.4	0
Q408 B	5.3	4.7	4.9	5.0	5.2	5.2
E	6.0	6.2	5.9	6.1	6.0	6.1
Q409 B	1.9	1.6	1.6	1.6	1.7	1.6
Ε	2.0	2.2	2.2	2.2	2.3	2.2
						do rein
Q411 C	1.4	1.4	0.9	1.3		
Q412 B					1.3	1.4
	1 1.3					
_	1.3	1.3	1.0	1.3	1.1	1.4
Ε	2.0	1.3 1.9		1.3 1.9		1.4
	2.0	1.3 1.9	1.0	1.3 1.9	1,1 1.8	1.4
Q413 G	2.0 2.0	1.3 1.9 - 15.1	1.0 1.7 1.6	1.3 1.9 - 2.2	1.1 1.8 1.8	1.4 2.0 - 2.1
Q413 G D	2.0 2.0 2.0	1.3 1.9 - 15.1 1.9	1.0 1.7 1.6 - 4.3	1.3 1.9 - 2.2 0	1.1 1.8 1.8 2.2	1.4 2.0 - 2.1 2.0
Q413 G D S	2.0 2.0	1.3 1.9 - 15.1	1.0 1.7 1.6 - 4.3	1.3 1.9 - 2.2 0 1.9	1.1 1.8 1.8 2.2	1.4 2.0 - 2.1
Q413 G D	2.0 2.0 2.0	1.3 1.9 - 15.1 1.9	1.0 1.7 1.6 - 4.3	1.3 1.9 - 2.2 0	1.1 1.8 1.8 2.2	1.4 2.0 - 2.1 2.0
Q413 G O S Q417 B	2.0 2.0 2.0 2.0 1.4	1.3 1.9 - 15.1 1.9 1.9	1.0 1.7 1.6 - 4.3 1.7	1.3 1.9 - 2.2 0 1.9	1.1 1.8 1.8 2.2 1.8	1.4 2.0 - 2.1 2.0 2.0 1.4
Q413 G D S Q417 B Q418 C	2.0 2.0 2.0 2.0 1.4 2.1	1.3 1.9 - 15.1 1.9 1.9 1.4 2.1	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7	1.3 1.9 - 2.2 0 1.9 1.2	1.1 1.8 1.8 2.2 1.8 1.2	1.4 2.0 - 2.1 2.0 2.0 1.4 2.0
Q413 G O S Q417 B	2.0 2.0 2.0 2.0 1.4	1.3 1.9 - 15.1 1.9 1.9	1.0 1.7 1.6 - 4.3 1.7	1.3 1.9 - 2.2 0 1.9	1.1 1.8 1.8 2.2 1.8	1.4 2.0 - 2.1 2.0 2.0 1.4
Q413 G D S Q417 B Q418 C Q419 B	2.0 2.0 2.0 2.0 1.4 2.1 1.4	1.3 1.9 - 15.1 1.9 1.9 1.4 2.1	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7	1.3 1.9 - 2.2 0 1.9 1.2 1.7	1.1 1.8 1.8 2.2 1.8 1.2 1.7	1.4 2.0 - 2.1 2.0 2.0 1.4 2.0
Q413 G D S Q417 B Q418 C Q419 B	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0	1.3 1.9 - 15.1 1.9 1.9 1.4 2.1 1.4	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.2	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.1	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2	1.4 2.0 - 2.1 2.0 2.0 1.4 2.0 1.5 2.0
Q413 G O S Q417 B Q418 C Q419 B E Q420 B	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0	1.3 1.9 - 15.1 1.9 1.9 1.4 2.1 1.4 1.9	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.2 1.7	1.3 1.9 - 2.2 0 1.9 1.2 1.7 1.1	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.7 1.2	1.4 2.0 - 2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3
Q413 G D S Q417 B Q418 C Q419 B	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0	1.3 1.9 - 15.1 1.9 1.9 1.4 2.1 1.4	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.2	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.1	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2	1.4 2.0 - 2.1 2.0 2.0 1.4 2.0 1.5 2.0
Q413 G O S Q417 B Q418 C Q419 B E Q420 B	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2	1.3 1.9 - 15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.2 1.7 1.0	1.3 1.9 - 2.2 0 1.9 1.2 1.7 1.1 1.7	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2	1.4 2.0 - 2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3
Q413 G O S Q417 B Q418 C Q419 B E Q420 B E Q422 C	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8	1.3 1.9 - 15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.2 1.7 1.0 1.6	1.3 1.9 - 2.2 0 1.9 1.2 1.7 1.1 1.7 1.0	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2	1.4 2.0 - 2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0
Q413 G O S Q417 B Q418 C Q419 B E Q420 B	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2	1.3 1.9 - 15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.2 1.7 1.0	1.3 1.9 - 2.2 0 1.9 1.2 1.7 1.1 1.7	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2	1.4 2.0 - 2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3
Q413 G	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5	1.3 1.9 - 15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.2 1.7 1.0 1.6 1.7	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.9 0.4	1.4 2.0 - 2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2
Q413 G	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5	1.3 1.9 - 15.1 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5	1.0 1.7 1.6 -4.3 1.7 1.2 1.7 1.2 1.7 1.0 1.6 1.7	1.3 1.9 - 2.2 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.2 1.8	1.4 2.0 - 2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5
Q413 G	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5	1.3 1.9 - 15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.2 1.8 0.4	1.4 2.0 - 2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5
Q413 G	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5	1.3 1.9 - 15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8	1.0 1.7 1.6 -4.3 1.7 1.2 1.7 1.2 1.7 1.0 1.6 1.7	1.3 1.9 - 2.2 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.2 1.8	1.4 2.0 - 2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5
Q413 G Q417 B Q418 C Q419 B E Q420 B E Q422 C Q423 B Q425 C Q426 C Q429 B	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8	1.3 1.9 - 15.1 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7	1.3 1.9 - 2.2 0 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.9 0.4 4.7 0.7	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0
Q413 G	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 2.1 1.2 1.8 2.1 0.3 4.5 0.8 -2.3	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7	1.3 1.9 - 2.2 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7	1.1 1.8 1.8 1.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.2 1.8 0.4 4.7 0.7	1.4 2.0 -2.1 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1
Q413 G Q417 B Q418 C Q419 B E Q420 B E Q422 C Q423 B Q425 C Q426 C Q429 B	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8	1.3 1.9 - 15.1 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7	1.3 1.9 - 2.2 0 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.9 0.4 4.7 0.7	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0
Q413 G	2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 0.8 -2.3 -3.8	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 - 1.2 - 3.4	1.3 1.9 - 2.2 0 1.9 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 - 1.2 - 2.7	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 0.4 4.7 0.7 0.1	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0
Q413 G Q417 B Q418 C Q419 B E Q420 E Q422 C Q423 B Q425 C Q426 C Q426 C Q429 B E Q432 B C	2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0	1.3 1.9 - 15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 0.8 - 2.3 - 3.8 11.6	1.0 1.7 1.6 -4.3 1.7 1.2 1.7 1.0 1.8 1.7 0.4 4.5 0.7 0.4 -1.2 -3.4	1.3 1.9 - 2.2 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 - 1.2 - 2.7	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.8 1.8 0.4 4.7 0.7 0.1 0.4 -0.1	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.6
0413 G 0 S S 0417 B Q418 C 0419 B E 0420 C 0423 B 0425 C 0426 C 0429 B E 0432 B C 0433 B	2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0	1.3 1.9 - 15.1 1.9 1.4 2.1 1.4 2.1 1.9 1.2 1.8 2.1 0.3 4.5 0.8 0.8 - 2.3 - 3.8 11.8 - 0.1	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 - 1.2 - 3.4 11.8 0	1.3 1.9 - 2.2 0 1.9 1.2 1.7 1.1 1.0 1.6 1.7 0.4 4.5 0.7 0.4 - 1.2 1.8 0	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.8 1.8 1.0 0.4 4.7 0.7 0.1 0.4 -0.1 12.0 0	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7
Q413 G Q417 B Q418 C Q419 B E Q420 E Q422 C Q423 B Q425 C Q426 C Q426 C Q429 B E Q432 B C	2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0	1.3 1.9 - 15.1 1.9 1.4 2.1 1.4 2.1 1.9 1.2 1.8 2.1 0.3 4.5 0.8 0.8 - 2.3 - 3.8 11.8 - 0.1	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 - 1.2 - 3.4 11.8 0	1.3 1.9 - 2.2 0 1.9 1.2 1.7 1.1 1.0 1.6 1.7 0.4 4.5 0.7 0.4 - 1.2 1.8 0	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.8 1.8 1.0 0.4 4.7 0.7 0.1 0.4 -0.1 12.0 0	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7
Q413 G O O O O O O O O O O O O O O O O O O O	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 -0.3 11.9 0	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 2.1 1.9 1.2 1.8 2.1 0.3 4.5 0.8 -2.3 -3.8 11.8 -0.1 3.0	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 - 1.2 - 3.4 11.8 0	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 3.0	1.1 1.8 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.2 1.8 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0.1 0.4 -3.9 11.8 2.7
Q413 G	2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 -0.3 11.9 0 3.0 -0.1	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 0.8 -2.3 -3.8 11.8 -0.1 3.0 0	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.6 1.7 1.2 1.7 0.4 4.5 0.7 0.4 - 1.2 - 3.4 11.8 0 3.0 0	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 3.0 0	1.1 1.8 1.8 1.2 1.2 1.7 1.2 1.8 1.2 1.8 1.2 1.8 0.4 4.7 0.7 0.1 0.4 -0.1 12.0 0 4.5 -0.1	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7 0
Q413 G O O O O O O O O O O O O O O O O O O O	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 -0.3 11.9 0	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 2.1 1.9 1.2 1.8 2.1 0.3 4.5 0.8 -2.3 -3.8 11.8 -0.1 3.0	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 - 1.2 - 3.4 11.8 0	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 3.0	1.1 1.8 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.2 1.8 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7
0413 G 0 S Q417 B 0418 C 0419 B E 0420 C 0429 B 0425 C 0426 C 0429 B E 0433 B C 0433 B C 0434 B C 0434 B C	2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 0 3.0 0 0 0	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 0.8 0.8 -2.3 -3.8 11.6 -0.1 3.0 0 4.7	1.0 1.7 1.6 -4.3 1.7 1.2 1.7 1.0 1.8 1.7 0.4 4.5 0.7 0.4 -1.2 -3.4 11.8 0	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 3.0 0 4.8	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 0.4 4.7 0.7 0.1 12.0 0 4.5 -0.1 2.9	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7 0 0.4
Q413 G	2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 0 3.0 0 0 0	1.3 1.9 - 15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 0.8 - 2.3 11.6 - 0.1 3.0 0 4.7 2.9	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 - 1.2 - 3.4 11.8 0 0 3.0 0 4.5 - 3.1	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 3.0 0 4.8 -2.4	1.1 1.8 1.8 1.2 1.7 1.2 1.7 1.2 1.8 1.2 1.8 1.9 0.4 4.7 0.7 0.1 0.4 4.7 0.7 0.1 0.4 4.7 0.7 0.1 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7 0 0.4 0
0413 G 0 S Q417 B 0418 C 0419 B E 0420 C 0429 B 0425 C 0426 C 0429 B E 0433 B C 0433 B C 0434 B C 0434 B C	2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 0 3.0 0 0 0	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 0.8 0.8 -2.3 -3.8 11.6 -0.1 3.0 0 4.7	1.0 1.7 1.6 -4.3 1.7 1.2 1.7 1.0 1.8 1.7 0.4 4.5 0.7 0.4 -1.2 -3.4 11.8 0	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 3.0 0 4.8	1.1 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 0.4 4.7 0.7 0.1 12.0 0 4.5 -0.1 2.9	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7 0 0.4
0413 G 0 O S 0417 B Q418 C O419 B E 0420 B E 0422 C 0423 B 0425 C 0429 B E 0426 C 0429 B C 0432 B C 0434 B C 0434 B C 0434 B C 0438 B C	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 -0.3 11.9 0 3.0 -0.1 0 3.0 -0.1 -0.1 0 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 -2.3 -3.8 11.6 -0.1 3.0 0 4.7 -2.9 11.4	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.6 1.7 1.0 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 - 1.2 - 3.4 11.8 0 0 0 0 0 0 0 0 0 0 0 0 0	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 0 4.8 -2.4 11.7	1.1 1.8 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 0.4 4.7 0.7 0.1 0.4 -0.1 12.0 0 4.5 -0.1 2.9 0	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7 0 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0
Q413 G	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 -0.3 11.9 0 -0.1 3.6 -0.1 3.6 -0.1 3.6 -0.1	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 -2.3 -3.8 11.6 -0.1 3.0 0 4.7 -2.9 11.4 1.9	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.8 1.7 0.4 4.5 0.7 0.4 - 1.2 - 3.4 11.8 0 0 0 4.5 - 3.1 11.7	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 3.0 0 4.8 -2.4 11.7	1.1 1.8 1.8 1.8 1.2 1.7 1.2 1.8 1.2 1.7 1.2 1.8 1.2 1.9 0.4 4.7 0.7 0.1 0.4 -0.1 12.0 0 4.5 -0.1 2.9 0 11.8 1.8	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7 0 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0
0413 G 0 O S 0417 B Q418 C O419 B E 0420 B E 0422 C 0423 B 0425 C 0429 B E 0426 C 0429 B C 0432 B C 0434 B C 0434 B C 0434 B C 0438 B C	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 -0.3 11.9 0 3.0 -0.1 0 3.0 -0.1 -0.1 0 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 0.8 -2.3 -3.8 11.8 -0.1 3.0 0 4.7 -2.9 11.4 1.9	1.0 1.7 1.6 -4.3 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -3.4 11.8 0 3.0 0 4.5 -3.1 11.7 1.8 1.8 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 3.0 0 4.8 -2.4 11.7 2.4	1.1 1.8 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 0.4 4.7 0.7 0.1 0.4 -0.1 12.0 0 4.5 -0.1 2.9 0	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7 0 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0
0413 G	2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 0.8 -2.3 -3.8 11.8 -0.1 3.0 0 4.7 -2.9 11.4 1.9	1.0 1.7 1.6 -4.3 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -3.4 11.8 0 3.0 0 4.5 -3.1 11.7 1.8 1.8 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 3.0 0 4.8 -2.4 11.7 2.4	1.1 1.8 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.8 0.4 4.7 0.7 0.1 12.0 0 4.5 -0.1 2.9 0 11.6 1.8 0	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7 0 0.4 0.4 0.4 0.4 0.4 0.4 0.4
0413 G 0 S S 0417 B 0418 C 0419 B E 0420 C 0423 B 0425 C 0426 C 0426 C 0428 B E 0432 B C 0433 B C 0434 B C 0438 B C 0438 B C 0439 B E 0440 B	2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 3.0 -0.3 11.9 0 3.0 -0.1 3.6 -0.4 11.7 2.0 2.6 2.6 2.6 2.6 2.6 2.6 2.6 2.7 2.7 2.7 2.7 2.7 2.7 2.7 2.7	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 0.8 -2.3 -3.8 11.6 -0.1 3.0 0 4.7 -2.9 11.4 1.9 2.5 2.5	1.0 1.7 1.6 -4.3 1.7 1.2 1.7 1.0 1.8 1.7 1.0 1.8 1.7 0.4 4.5 0.7 0.4 -1.2 -3.4 11.8 0 3.0 0 4.5 -3.1 11.7 11.8 11.7 11.8 11.7 11.8	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 4.5 0.7 0.4 4.5 0.7 11.8 0 3.0 0 4.8 -2.4 11.7 1.7 1.7 2.4 2.5	1.1 1.8 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.9 0.4 4.7 0.7 0.1 12.0 0 4.5 -0.1 2.9 0 11.6 1.8 0 2.4	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7 0 0.4 0.4 -3.9 11.8 2.7 0 0.4 0.4 0.4 0.4 0.4 0.4 0.4
Q413 G	2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 -0.3 11.9 0 3.0 -0.4 11.7 2.0 2.6 -1.1	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 -2.3 -3.8 11.8 0.0 0 4.7 -2.9 11.4 1.9 2.5 -13.0	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.8 1.7 0.4 4.5 0.4 - 1.2 - 3.4 11.8 0 0 4.5 - 3.1 11.7 1.8 1.7 1.9 1.9 1.7 1.9 1.7 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 4.8 -2.4 11.7 1.7 2.4 2.5 -4.8	1.1 1.8 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.2 1.8 0.4 4.7 0.1 0.4 -0.1 12.0 0 4.5 -0.1 2.9 0 11.6 1.8 0 2.4 0	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.6 2.7 0 0.4 11.7 2.0 2.6 2.7 -0.7
Q413 G	2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 -0.3 11.9 0 3.0 -0.4 11.7 2.0 2.6 -1.1	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 -2.3 -3.8 11.8 0.0 0 4.7 -2.9 11.4 1.9 2.5 -13.0	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.8 1.7 0.4 4.5 0.4 - 1.2 - 3.4 11.8 0 0 4.5 - 3.1 11.7 1.8 1.7 1.9 1.9 1.7 1.9 1.7 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 4.8 -2.4 11.7 1.7 2.4 2.5 -4.8	1.1 1.8 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.2 1.8 0.4 4.7 0.1 0.4 -0.1 12.0 0 4.5 -0.1 2.9 0 11.6 1.8 0 2.4 0	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.6 2.7 0 0.4 11.7 2.0 2.6 2.7 -0.7
Q413 G	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 -0.3 11.9 0 3.0 -0.1 3.6 -0.1 3.6 -0.1 2.0 -0.1 2.0 -0.1 2.0 -0.1 -0.	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 -2.3 -3.8 11.6 -0.1 3.0 0 4.7 -2.9 11.4 1.9 2.5 -13.0 1.9	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.8 1.7 0.4 4.5 0.7 0.4 - 1.2 - 3.4 11.8 0 0 4.5 - 3.1 11.7 1.8 1.7 1.8 1.7 1.9 1.7 1.9 1.7 1.9 1.7 1.9 1.7 1.9 1.7 1.9 1.7 1.9 1.7 1.9 1.7 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 3.0 0 4.8 -2.4 11.7 1.7 2.4 2.5 -4.8 1.9	1.1 1.8 1.8 1.8 1.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.2 1.9 0.4 4.7 0.7 0.1 0.4 -0.1 12.0 0 4.5 -0.1 2.9 0 11.8 0 2.4 0 1.8	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7 0 0.4 0 0.4 -2.0 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0
0413 G	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 0 0 0 0 0 0 0 0 0 0 0 0	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 0.8 -2.3 -3.8 11.8 -0.1 3.0 0 4.7 -2.9 11.4 1.9 2.5 -13.0 1.9 1.9	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 4.5 0.7 0.4 - 1.2 - 3.4 11.8 0 0 4.5 - 1.2 - 3.4 11.8 0 - 2.5 - 3.4 11.7 1.8 - 3.6 - 3.	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 0 4.8 -2.4 11.7 1.7 2.4 2.5 -4.8 1.9	1.1 1.8 1.8 1.8 1.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.2 1.8 1.0 1.0 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7 0 0.4 0.4 -2.0 0.4 -3.9 11.8 2.7 0 0.4 -3.9 0.4 -3.9 0.4 -3.9 0.4 -3.9 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4
Q413 G	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 -0.3 11.9 0 3.0 -0.1 3.6 -0.1 3.6 -0.1 2.0 -0.1 2.0 -0.1 2.0 -0.1 -0.	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 -2.3 -3.8 11.6 -0.1 3.0 0 4.7 -2.9 11.4 1.9 2.5 -13.0 1.9	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.8 1.7 0.4 4.5 0.7 0.4 - 1.2 - 3.4 11.8 0 0 4.5 - 3.1 11.7 1.8 1.7 1.8 1.7 1.9 1.7 1.9 1.7 1.9 1.7 1.9 1.7 1.9 1.7 1.9 1.7 1.9 1.7 1.9 1.7 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 3.0 0 4.8 -2.4 11.7 1.7 2.4 2.5 -4.8 1.9	1.1 1.8 1.8 1.8 1.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.2 1.9 0.4 4.7 0.7 0.1 0.4 -0.1 12.0 0 4.5 -0.1 2.9 0 11.8 0 2.4 0 1.8	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.6 2.7 0 0.4 0.4 0.4 0.4 0.4 0.4 0.4
Q413 G	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 3.0 -0.3 11.9 0 3.0 -0.1 3.6 -0.4 11.7 2.6 2.6 -1.1 2.0 2.6 -1.1 2.0 2.6 -1.1 2.7 2.7 2.7 2.7 2.7 2.7 2.7 2.7	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 0.8 0.8 -2.3 -3.8 11.8 -0.1 3.0 0 4.7 -2.9 11.4 1.9 2.5 2.5 -13.0 1.9 1.3	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.8 1.7 0.4 4.5 - 3.4 11.8 0 4.5 - 3.1 11.7 1.8 1.7 1.9 1.7 1.0 1.7 1.0 1.7 1.7 1.0 1.7 1.7 1.0 1.7 1.7 1.7 1.0 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 3.0 0 4.8 -2.4 11.7 1.7 1.7 1.7 1.8 1.9 1.9 1.9	1.1 1.8 1.8 1.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.2 1.8 1.0 0.4 4.7 0.7 0.1 0.4 -0.1 12.0 0 4.5 -0.1 2.9 0 11.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 1.8 0 1.8 1.8 0 1.8 1.8 1.8 1.8 0 1.8 0	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7 0 0.4 0.4 -2.4 11.7 2.0 2.0 2.0 1.3 1.9 2.0 0.2 2.0 0.2 4.5 0.2 4.5 0.2 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4
Q413 G	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 3.0 -0.3 11.9 0 3.0 -0.1 2.0 1.2 1.2 1.3 2.1 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 2.1 1.9 1.2 1.8 2.1 0.3 4.5 0.8 -2.3 -3.8 11.6 -0.1 3.0 0 4.7 -2.9 11.4 1.9 2.5 -13.0 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.8 1.7 1.0 1.8 1.7 0.4 4.5 0.7 0.4 - 1.2 - 3.4 11.8 0 0 4.5 - 3.1 11.7 1.8 2.4 2.5 1.7 - 8.1 1.8 1.7 0.7	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 11.8 0 4.8 -2.4 11.7 1.7 2.4 1.9 1.9 1.9 1.9 1.9 1.9 1.1 0.7	1.1 1.8 1.8 1.8 2.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 0.4 4.7 0.7 0.1 0.4 -0.1 12.0 0 4.5 -0.1 2.9 0 11.6 1.8 0 2.4 0 1.8 1.8 0 1.8 1.8 0 1.8 1.9 0 1.8 1.8 0 1.8 0 1.8 0 1.8 0 1.8 0 1.8 0 1.8 0 1.8 0 1.8 0 1.8 0 1.8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7 0 0.4 0 -2.4 11.7 2.0 2.6 2.7 -0.7 2.0 2.0 2.1 1.5
Q413 G	2.0 2.0 2.0 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 3.0 -0.3 11.9 0 3.0 -0.1 3.6 -0.4 11.7 2.6 2.6 -1.1 2.0 2.6 -1.1 2.0 2.6 -1.1 2.7 2.7 2.7 2.7 2.7 2.7 2.7 2.7	1.3 1.9 -15.1 1.9 1.9 1.4 2.1 1.4 1.9 1.2 1.8 2.1 0.3 4.5 0.8 0.8 0.8 -2.3 -3.8 11.8 -0.1 3.0 0 4.7 -2.9 11.4 1.9 2.5 2.5 -13.0 1.9 1.3	1.0 1.7 1.6 - 4.3 1.7 1.2 1.7 1.0 1.8 1.7 0.4 4.5 - 3.4 11.8 0 4.5 - 3.1 11.7 1.8 1.7 1.9 1.7 1.0 1.7 1.0 1.7 1.7 1.0 1.7 1.7 1.0 1.7 1.7 1.7 1.0 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7	1.3 1.9 -2.2 0 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 3.0 0 4.8 -2.4 11.7 1.7 1.7 1.7 1.8 1.9 1.9 1.9	1.1 1.8 1.8 1.2 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.2 1.8 1.0 0.4 4.7 0.7 0.1 0.4 -0.1 12.0 0 4.5 -0.1 2.9 0 11.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 0 1.8 1.8 1.8 0 1.8 1.8 0 1.8 1.8 1.8 1.8 0 1.8 0	1.4 2.0 -2.1 2.0 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.8 2.7 0 0.4 0.4 -2.4 11.7 2.0 2.0 2.0 1.3 1.9 2.0 0.2 2.0 0.2 4.5 0.2 4.5 0.2 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4

PAL SECAM NTSC NTSC 4.43 S-VIDEO ANALOG RGB

A BOARD (2/3) * MARK

4 DO	ן עחא	43) +	MAUL	•		
	PAL	SECAM	NTSC 3.58	NTSC 4.43	S-VIDEO	ANALOG RGB
C301 ①	2.8	0	2.8	3.0	3.0	2.3
2	2.0	0	1.8	1.7	1.7	3.5
302 ①	2.9	2.9	2.9	0.3	2.9	2.9
(5)	5.3	5.1	4.5	4.5	4.5	4.5
0	10.5	8.4	0	0	Ö	0
303 🔞	2.3	2.6	2.2	2.2	2.6	2.8
0	0.1	4.2	0.6	0.6	0.6	0.1
19	3.9	2.8	3.1	3.1	3.3	3.9
304 ④	2.2	2.6	2.2	2.2	2.2	2.2
	9.4					
9		0.1	9.4	9.4	9.4	9.4
O	7.3	7.3	2.5	2.5	2.6	2.5
	7.3	7.3	2.5	2.6	2.6	2.5
(3)	1.9	1.9	2.2	2.2	2.2	2.2
(5)	2.5	2.5	2.2	2.2	2.3	2.2
2305 ①	2.8	2.8	2.8	0	2.8	2.8
④	2.5	1.1	2.5	2.4	2.4	1.3
0	4.1	4.1	4.1	4.1	4.2	4.5
9	0.4	0.2	0	0	0	0.1
0	2.6	2.6	2.5	2.4	2.5	2.7
8	0	0	0.8	0.8	0.9	0.9
8	2.1	2.7	1.9	1.9	1.9	2.7
	8.1	8.1		8.1		0
2306 ①			8.1		8.1	
2	0	1 0	0	0.1	0.1	4.4
2309 ②	3.6	0	3.6	3.6	3.6	3.6
<u> </u>	0	0	0	0	0	4.4
C310 ①	6.2	6.2	6.2	6.2	6.2	5.9
3	6.3	6.3	6.2	6.2	6.2	5.9
(3)	5.9	5.9	6.0	6.3	5.9	5.9
C311 ①	0	6.2	6.2	6.2	6.2	6.2
2	6.2	6.2	6.2	6.2	6.2	5.9
<u> </u>	6.2	6.3	6.3	6.2	6.2	5.9
6	3.3	3.3	2.9	2.9	2.9	0
		+		6.2	5.8	5.9
0	5.9	5.9	5.9			
<u> </u>	0.4	0.4	0.4	0.4	0.5	0.7
C312 (2)	3.6	0	3.6	3.6	3.6	3.6
④	0	0	0	12.0	0.1	4.5
C313 ①	0	6.3	0	6.3	6.3	6.3
C314 ②	0	3.0	7.6	0	3.0	0
4	0	0	0	0	2.9	0.1
C315 ①	0.4	0.4	0.4	0.4	0.4	0.6
(4)	0.6	0	0.6	0.6	0.6	0.6
(1)	9.4	9.3	9.3	9.2	9.3	9.4
Ū	2.5	2.5	2.5	2.5	2.5	7.2
0	0.4	0.4	0.4	0.4	0.4	0.6
· (§	0.4	0.4	0.4	0.4	0.4	0.6
C317 ④	2.0	0.4	2.0	2.1	2.0	12.0
	12.0		12.0			
<u> </u>		100		12.0	12.0	12.0
9	10.7	10.6	10.6	10.6	10.5	10.7
<u> </u>	9.4	9.4 -	9.4	9.4	9.1	9.4
C318 (5)	11.5	11.5	0	11.4	11,4	11.4
C320 ①	6.3	6.3	6.3	6.3	6.3	0
. ②	3.0	0	0	3.1	0	0
④	0	0	0	0	3.3	0
C321 ②	0	0.1	0.1	0	2.9	0
(4)	0	0	0	0	0.1	2.7
C322 (S)	5.8	5.9	6.0	6.3	5.9	5.9
C323 (S)	6.2	6.3	6.2	6.2	6.2	5.9
0	0	5.6	5.6	5.6	5.6	5.6
C324 (5)	6.2	6.2	6.2	6.2	6.2	5.9
C326 ①	5.9	5.9	6.0	6.3	5.9	5.9
C326 (f)	5.9	5.9	5.9	6.2	5.8	5.9
3	5.9	5.9	5.9	6.2	5.8	5.9
<u> </u>	1.7	1.9	1.6	1.6	2.1	2.1
<u> </u>	2.4	1.0	2.3	2.3	2.3	4.6
0	0	- 0.1	10.8	0	- 0.1	0
(8)	6.3	6.3	6.3	6.3	6.2	5.9
9	6.3	6.3	6.3	6.3	6.2	5.9
<u> </u>	6.3	6.3	6.2	6.2	6.2	5.9
(4)	1 0.0	0.5	1 0.4	0.4	1 0.4	1 0.0

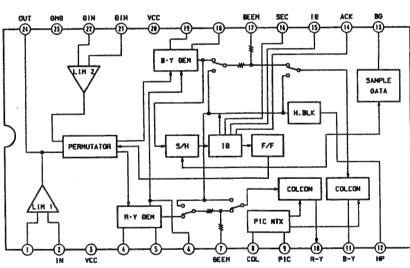
	PAL	SECAM	NTSC	NTSC	S-VIDEO	ANALOG
10005 0			3.58	4.43		RGB
IC326 0	6.2	6.2	6.2	6.2	6.2	5.9
0	6.2	6.2	6.2 6.2	6.3 6.2	6.2	5.9 5.9
IC350 ①	6.2 6.6	6.2	6.4	6.3	6.1	6.9
IC350 ①	6.2	6.5	6.2	6.3	6.0	6.4
9	6.2	6.2	6.2	6.3	6.0	6.4
Q300 B	2.5	2.5	2.2	2.2	2.2	2.2
C	10.2	10.2	10.4	10.5	10.4	10.5
Е	1.9	1.9	1.6	1.6	1.6	1.6
Q301 E	8.6	8.5	8.2	8.3	8.5	9.8
Q303 E	5.7	5.7	5.7	5.7	5.5	5.7
Q304 B	6.3	6.3	6.3	6.4	6.2	6.3
E	5.7	5.7	5.7	5.7	5.5	5.7
Q305 B	8.6	8.5	8.2	8.3	8.5	9.8
E	7.9	7.9	7.6	7.7	7.9	9.1
0307 E	1.4	1.4	1.1	1.2	1.4	2.7
Q309 B	0.1	0.1	0.2	0.1	0.1	0
E	0.7	1.8	1.7	1.8	0.1	1.8
0312 C	8.2	8.2	8.6	8.3	8.3	8.1
Q313 B	8.2	8.2	8.6	8.3	8.2	8.1
Ē	8.8	8.8	9.3	9.0	8.9	8.7
Q314 B	11.9	6.4	11.9	11.9	11.9	11.9
C	0	11.9	0	0	0	0
Q315 B	3.3	3.2	2.9	3.1	3.2	3.3
E	3.9	3.9	3.5	3.8	3.8	4.0
Q318 B	12.1	12.0	11.7	11.9	12.1	12.1
С	1.0	1.0	1.2	1.0	1.0	0.9
Q322 B	2.4	2.4	2.3	2.3	5.6	2.4
E	1.8	1.8	1.8	1.8	5.0	1.8
Q323 B	5.0	5.0	0	0	0	0
C	0	0	3.5	3.5	3.5	3.6
Q324 B	4.1	0	0 0.8	0.8	0.8	0.9
Q328 B	2.2	2.2	2.2	2.2	2.0	1.3
C	2.8	2.8	2.8	2.8	0	1 0
Q329 D	2.1	2.1	2.2	2.4	0	2.2
G	0	0	1.6	0	2.9	2.8
Q332 B	4.9	5.0	0	4.9	0	0
C	0	0	4.4	0	4.3	4.4
Q333 B	1.7	1.7	1.9	1.8	1.7	1.7
ε	1.5	1.5	1.7	_ 1.5	1.5	1.4
Q336 G	4.7	4.6	4.6	4.7	4.2	4.8
O	4.3	4.3-	4.3	4.3	4.5	4.3
Q339 B	12.3	- 12.5	12.5	12.4	12.5	12.3
Q347 B	0.1	4.2	0.1	0.1	0.6	0.1
0349 B	9.4	0.1 2.7	9.4	9.4	9.4	9.4
Q349 B	3.4	3.3	3.4	3.4	2.8	3.4
Q354 B	12.0	0.6	0	0	0	0
E	12.0	0.4	ŏ	Ö	1 6	- 0.2
Q358 €	2.2	2.2	0	2.2	2.2	2.2
Q360 1	6.2	6.2	6.2	6.3	6.1	6.4
3	6.2	6.2	6.2	6.3	6.0	6.4
5	1.3	4.7	2.2	4.1	5.3	3.8
Q361 B	4.9	4.9	5.0	5.0	5.0	8.0
С	0.1	0	0	0	0.1	4.9
Q362 C	9.0	9.0	9.0	9.5	9.2	8.5
Q364 C	3.3	3.3	2.9	2.9	2.8	2.9
Q365 B	0.4	1 0	0.3	0.3	0.4	0.4
Q369 B	0.8	0.9	0.8	0.8	0.9	4.9
Q372 B	0	11.7	0	0	0	4.9
Q374 B	11.7	10.3	11.8	11.8	11.7	6.4
Q374 B	0	0.3	0	0	6.2	6.7
E	6.4	6.4	6.3	6.3	6.1	6.7
Q375 B	10.7	10.8	10.7	10.7	10.7	5.9
C C	1 0	0	0	0	6.3	6.4
Ĕ	6.2	6.2	6.2	6.2	6.0	6.4
	7.2		4.5	1 214	5.0	0.4

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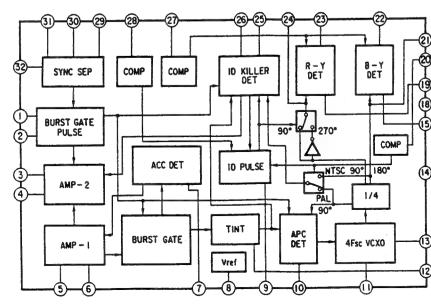
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CN508	2P WHT : MINI	#
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Q532	IRF520	#
R559	330k : CHIP	220k : CHIP
R562	47 1/4W : FPRD	#
R566	47k: RN-CP	27k : RN-CP
R574	47k : CHIP	#
R577	10k : CHIP	#
R581	T 1k : CHIP	#
R1501	12k : CHIP	10k : CHIP
R1539	1100k : CHIP	#
R1542	22 : FPRD	#
R1580	47k : CHIP	#
R1581	10M 1W:RS	#
R1582	2M 1W : RS	#
R1583	470 1/2W : RF	#
R1599	10k 1/2W : RC	#
R2502	22k : CHIP	18k : CHIP
R2504	150k : CHIP	100k : CHIP
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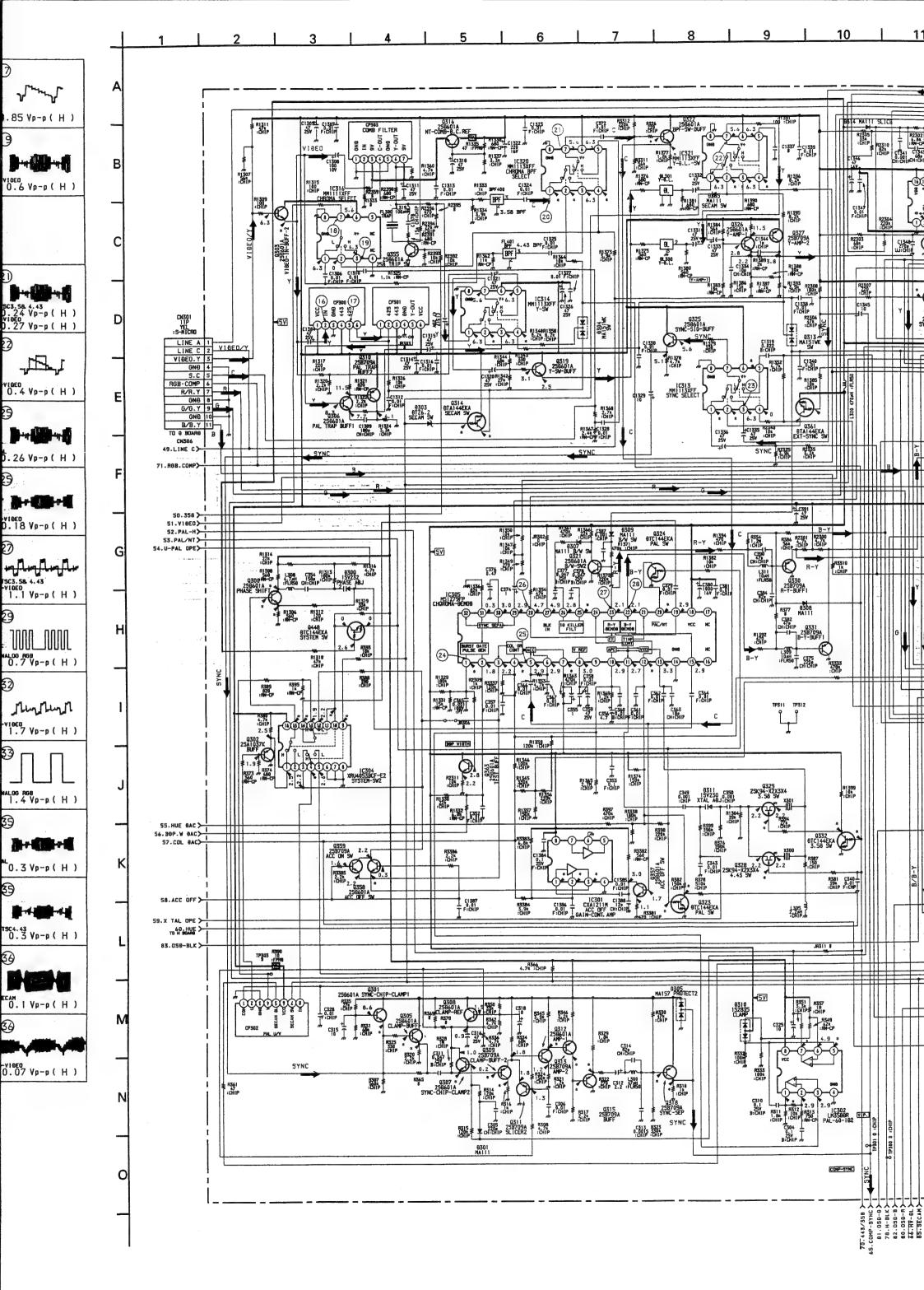


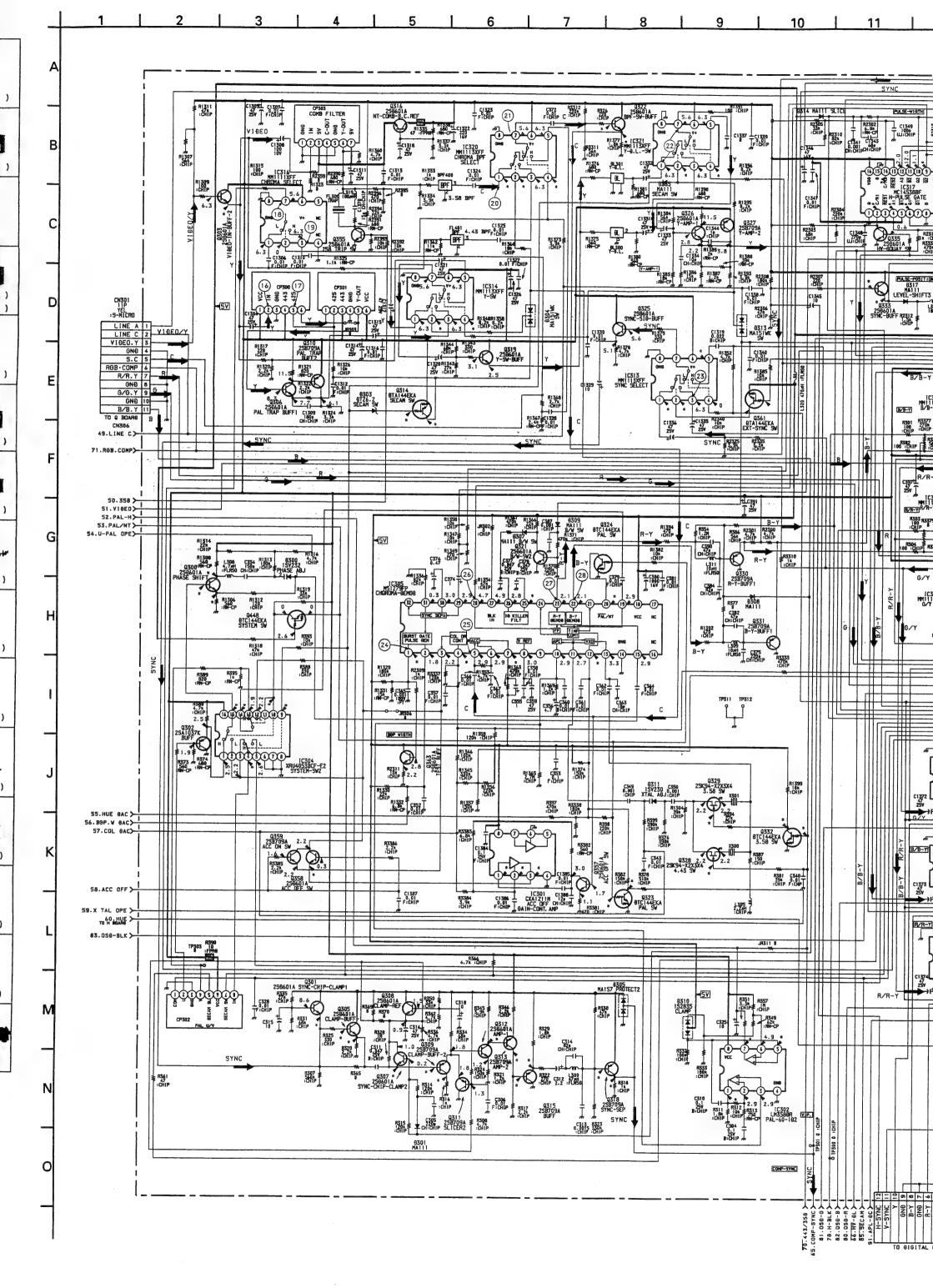
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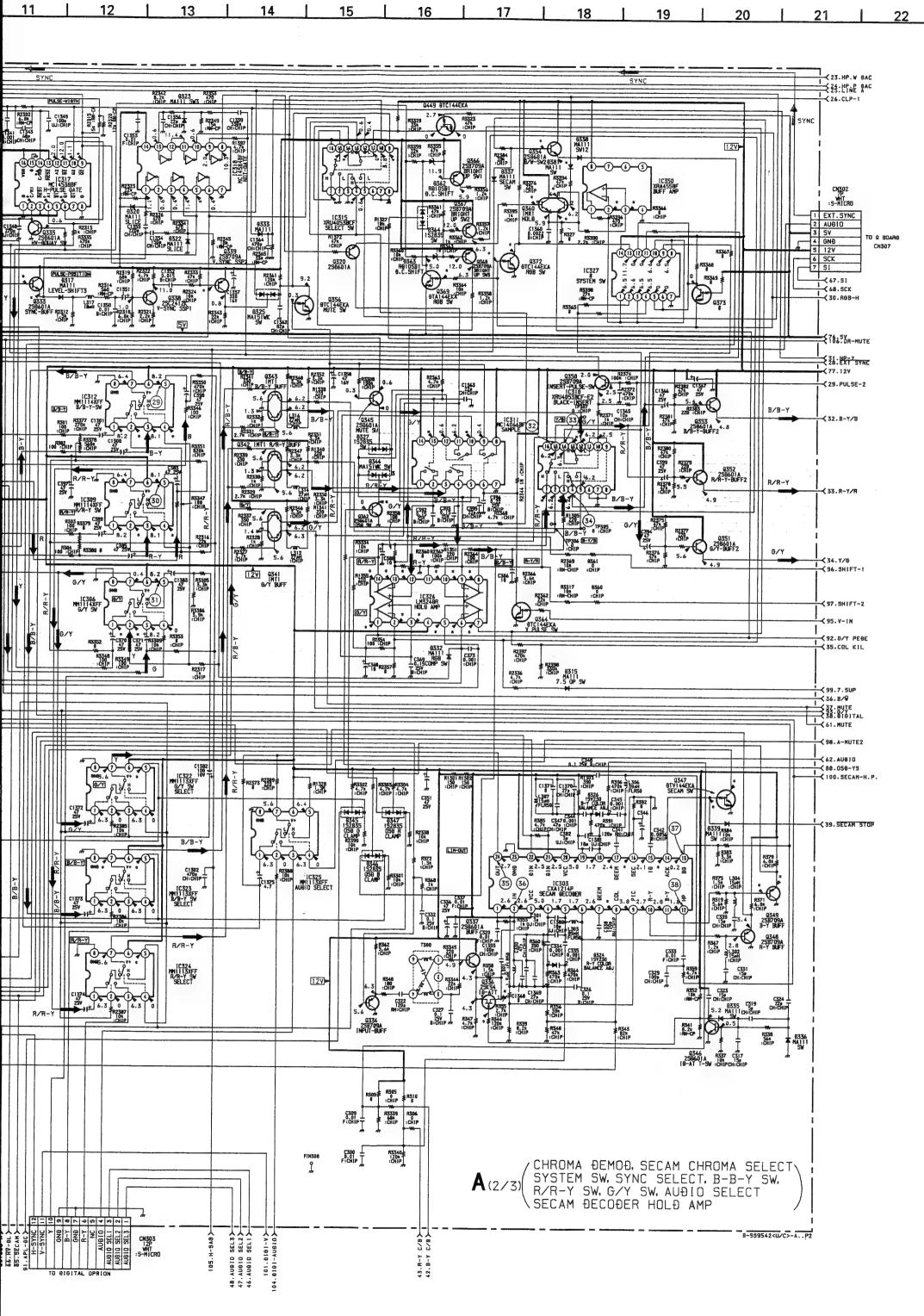
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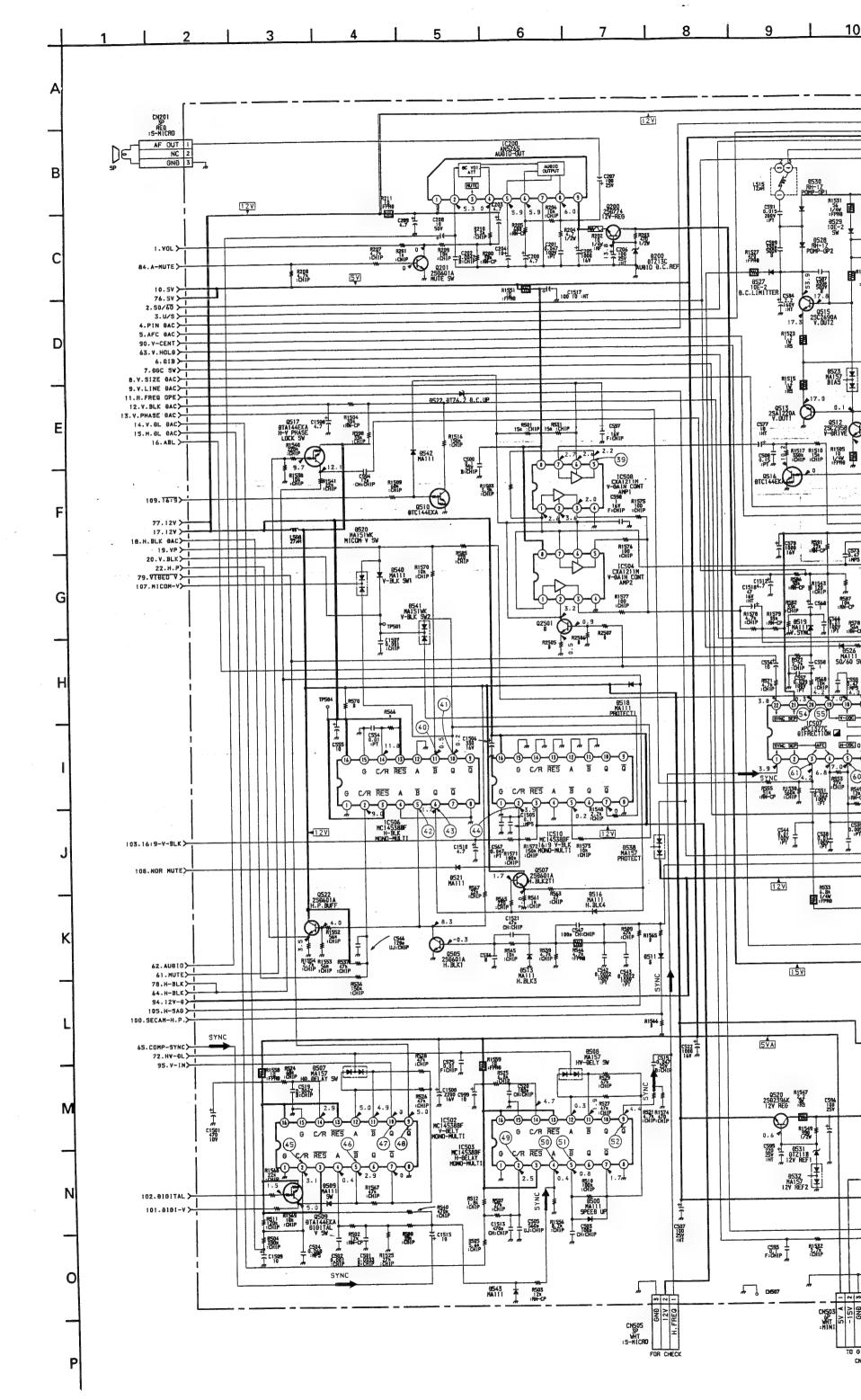
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	1.0 Vp-p (H)	9-VIDEO 0.94 Vp-p (H)	0.85 Vp-p(H)
		(18)	(19)
	Ment Legit	30 mm 1 mm	B48848
	5-V10E0 0.94 Vp-p (H)	5-V18E0 0.6 Vp-p (H)	9-419E0 0.6 Vp-p (H)
	20	②	
	- of the off	NTSC3.58 0.24 Vp-p(H)	
	0.2 Vp-p(H)	0.12 Vp-p (H)	
	2)	2),,,	2)
			P++4
	PAL	SECAM 0.17 Vp-p (H)	NTSC3.58. 4.43 0.24 Vp-p (H)
	0.27 Vp-p (H)		0.27 Vp-p(H)
	(3)	(3) Land L	2
	PAL Y	MTSC3.58	
	PAL 0.4 Vp-p(H) SECAM 0.36 Vp-p(H)	MTSC3.58 0.37 Vp-p(H) MTSC4.43 4.0 Vp-p(.H)	5-VIDED 0.4 Vp-p(H)
	23	23	29
			The same of the sa
1	ANALDO RGB	V V	PAL
_	1.9 Vp-p (H)	1.0 Vp-p (H)	0.26 Vp-p (H)
	29	25	29
-		D-11	**
	SECAM 0.2 Vp-p (H)	NTSC3.58. 4.43 0.23 Vp-p (H)	5-VIDED 0.18 Vp-p (H)
	8	Ø .	Ø
}	V V V	Month challen	NTSC3.58. 4.43
	5.4 Vp-p (H)	PAL 1.0 Vp-p (H)	1.1 Vp-p (H)
1	28	28	29
1			
	JAM WANNA	JAM WALLAND	
		MTSC4.43	
	PAL 0.8 Vp-p (H) NTSC3.56 Vp-p (H)	MTSC4.43 Vp-p (H) 5-Vieso	ANALOG RGB 0.7 Vp-p(H)
		MTSC4.43 0.73 5-vies Vp-p (H)	
	PAL 0.8 Vp-p (H) NTSC3.56 Vp-p (H)	MTSC4.43 Vp-p (H) 5-Vieso	ANALOG RGB 0.7 Vp-p(H)
	PAL 0.8 Vp-p (H) NTSC3.55 0.85 Vp-p (H)	MTSC4.43 Vp-p (H) 5-Vieso	AMALOG RGB 0.7 Vp-p(H)
	PAL 0.8 Vp-p (H) NTSC3.55 Vp-p (H) ©.85 Vp-p (H) © ANALOG RGB 0.7 Vp-p (H)	MTSC4.43 Vp-p (H) 0.73 Vp-p (H) 0.9 Vp-p (H) ANALOG RGB 0.7 Vp-p (H)	32 Junghing 3-vieen 1.7 Vp-p (H)
	PAL Q . 8 Vp - p (H) 0 . 85 Vp - p (H) 30	MTSC4.43 0.73 Vp-p(H) 5-V10E0 0.9 Vp-p(H)	AMALOO POE PP-P(H)
	PAL 0.8 Vp-p (H) NTSC3.55 Vp-p (H) 30 AMALOG RGB 0.7 Vp-p (H)	MTSC4.43 Vp-p (H) 0.73 Vp-p (H) 0.9 Vp-p (H) 3) ANALOG ROB 0.7 Vp-p (H)	32 32 3-11060 3-11
	PAL 0.8 Vp-p (H) NTSC3.55 Vp-p (H) ©.85 Vp-p (H) © ANALOG RGB 0.7 Vp-p (H)	MTSC4.43 Vp-p (H) 0.73 Vp-p (H) 0.9 Vp-p (H) ANALOG RGB 0.7 Vp-p (H)	32 Junghing 3-vieen 1.7 Vp-p (H)
	PAL 0.8 Vp-p (H) NTSC3.55 Vp-p (H) 30 ANALOG RGB 0.7 Vp-p (H)	MTSC4.43 0.73 Vp-p(H) 0.9 Vp-p(H) 31 ANALOG RGB 0.7 Vp-p(H)	ANALOG RGB 0.7 Vp-p (H) 32 3-v1060 1.7 Vp-p (H)
	PAL 0.8 Vp-p (H) NTSC3.56 Vp-p (H) 30 AMALOG RGB 0.7 Vp-p (H) 32 AMALOG RGB 1.4 Vp-p (H)	MTSC4.43 Vp-p (H) 0.73 Vp-p (H) 0.9 Vp-p (H) ANALOG ROB 0.7 Vp-p (H) 33 S-VIDEO 1.3 Vp-p (H)	AMALOO RGB 32 S-V1060 1.7 Vp-p (H) 33 AMALOO ROB AMALOO ROB AMALOO ROB
	PAL D. 8 Vp-p (H) NTSC3.55 Vp-p (H) 30 AMALOG RGB 0.7 Vp-p (H) 32 AMALOG RGB 1.4 Vp-p (H)	MTSC4.43 Vp-p (H) 0.73 Vp-p (H) 0.9 Vp-p (H) 3) ANALOG ROB 0.7 Vp-p (H) 33 5-V10EQ 1.3 Vp-p (H)	ANALOG RGB 3-V1060 1.7 Vp-p (H) 33 ANALOG RGB 1.4 Vp-p (H)
	PALO . 8 Vp-p (H) 0.85 Vp-p (H) © . 85 Vp-p (H) © . 85 Vp-p (H) © . 7 Vp-p (H)	MTSC4.43 Vp-p (H) O.73 Vp-p (H) O.9 Vp-p (H) ANALOG RGB O.7 Vp-p (H) S S-VIDEO 1.3 Vp-p (H) ANALOG RGB 1.4 Vp-p (H)	AMALOG RGB 3-V1860 1.7 Vp-p (H) 33 AMALOG RGB 1.4 Vp-p (H) 39 PALO. 3 Vp-p (H)
	PAL D. 8 Vp-p (H) NTSC3.55 Vp-p (H) 30 AMALOG RGB 0.7 Vp-p (H) 32 AMALOG RGB 1.4 Vp-p (H)	MTSC4.43 Vp-p (H) 0.73 Vp-p (H) 0.9 Vp-p (H) 3) ANALOG ROB 0.7 Vp-p (H) 33 5-V10EQ 1.3 Vp-p (H)	ANALOG RGB 3-V1060 1.7 Vp-p (H) 33 ANALOG RGB 1.4 Vp-p (H)
	PAL D. 8 Vp-p (H) NTSC3.55 Vp-p (H) (3) AMALOG RGB O. 7 Vp-p (H) (3) AMALOG RGB 1. 4 Vp-p (H) (3) 5-V10EG 1. 3 Vp-p (H)	MTSC4.43 Vp-p (H) 3.73 Vp-p (H) 3.9 Vp-p (H) 3.9 Vp-p (H) 3.3 S-VIDEO 1.3 Vp-p (H) 3.4 ANALOG ROB 1.4 Vp-p (H) 3.5 ANALOG ROB 1.4 Vp-p (H)	ANALOG RGB 3-V1060 1.7 Vp-p (H) 33 ANALOG RGB 1.4 Vp-p (H) 35 PALO 3 Vp-p (H)
	PALO . 8 Vp-p (H) 0.85 Vp-p (H) © . 85 Vp-p (H) © . 85 Vp-p (H) © . 7 Vp-p (H)	MTSC4.43 Vp-p (H) O.73 Vp-p (H) O.9 Vp-p (H) ANALOG RGB O.7 Vp-p (H) S S-VIDEO 1.3 Vp-p (H) ANALOG RGB 1.4 Vp-p (H)	AMALOG RGB 3-V1860 1.7 Vp-p (H) 33 AMALOG RGB 1.4 Vp-p (H) 39 PALO. 3 Vp-p (H)
	PALO . 8 Vp - p (H) 0.85 Vp - p (H) 30 AMALOO RGB 0.7 Vp - p (H) 32 AMALOO RGB 1.4 Vp - p (H) 34 5-V1060 Vp - p (H) 35	MTSC4.43 Vp-p (H) 3.73 Vp-p (H) 3.9 Vp-p (H) 3.9 Vp-p (H) 3.3 S-VIDEO 1.3 Vp-p (H) 3.4 ANALOG ROB 1.4 Vp-p (H) 3.5 ANALOG ROB 1.4 Vp-p (H)	ANALOG RGB 3-V1060 1.7 Vp-p (H) 33 ANALOG RGB 1.4 Vp-p (H) 35 PALO 3 Vp-p (H)
	PALO . 8 Vp-p (H) 0.85 Vp-p (H) © 0 ANALOS PGB P-p (H) © 2 ANALOS PGB P-p (H) © 2 ANALOS PGB P-p (H) © 3 S-V10EG 3 Vp-p (H) © 5 SECAM O. 1 Vp-p (H)	MTSC4.43 Vp-p (H) 30.73 Vp-p (H) 30.9 Vp-p (H) 30.9 Vp-p (H) 30.7 Vp-p (H) 30.3 Vp-p (H) 30.3 Vp-p (H) 30.3 Vp-p (H) 30.15 Vp-p (H)	AMALOG RGB 3-V1060 3-V1060 1.7 Vp-p (H) 33 AMALOG RGB 1.4 Vp-p (H) 39 PALO 3 Vp-p (H) 39 MTSC4.43 Vp-p (H)
	PAL 0.8 Vp-p (H) 0.85 Vp-p (H) 30 AMALOG RGB 0.7 Vp-p (H) 32 AMALOG RGB 1.4 Vp-p (H) 34 S-V1060 1.3 Vp-p (H) 35 SECAM 0.1 Vp-p (H)	MTSC4.43 Vp-p (H) 30.73 Vp-p (H) 30.9 Vp-p (H) 30.9 Vp-p (H) 30.7 Vp-p (H) 30.3 Vp-p (H) 30.3 Vp-p (H) 30.3 Vp-p (H) 30.15 Vp-p (H)	AMALOG RGB 3-V1060 3-V1060 1.7 Vp-p (H) 33 AMALOG RGB 1.4 Vp-p (H) 39 PALO 3 Vp-p (H) 39 MTSC4.43 Vp-p (H)
	PALO . 8 Vp-p (H) 0.85 Vp-p (H) © 0 ANALOG RGB P-P (H) © 2 ANALOG RGB P-P (H) © 3 S-VIOLED O. 1 Vp-p (H) © 5 SECAM O. 1 Vp-p (H) © 5 S-VIOLED O. 2 Vp-p (H)	MTSC4.43 Vp-p (H) 30.73 Vp-p (H) 30.9 Vp-p (H) 30.7 Vp-p (H) 30.7 Vp-p (H) 30.3 Vp-p (H) 30.15 Vp-p (H) 30.15 Vp-p (H) 30.15 Vp-p (H)	AMALOO RGB 3-V1000 PGB 3-V1000 PGB 1.7 VP-P (H) 33 AMALOO ROB 1.4 VP-P (H) 35 PALO 3 VP-P (H) 35 NTSC4.43 VP-P (H) 36 SECOM 1 VP-P (H)
	PAL 0.8 Vp-p (H) 0.85 Vp-p (H) 30 AMALOG RGB 0.7 Vp-p (H) 32 AMALOG RGB 1.4 Vp-p (H) 34 S-V1060 1.3 Vp-p (H) 35 SECAM 0.1 Vp-p (H)	MTSC4.743 Vp-p (H) O.73 Vp-p (H) O.9 Vp-p (H) ANALOG RGB O.7 Vp-p (H) 33 S-VIDEO 1.3 Vp-p (H) 34 ANALOG RGB 1.4 Vp-p (H) 35 NTSC3.58 Vp-p (H)	AMALOG RGB 32 32 3-V1060 1.7 Vp-p (H) 33 AMALOG RGB 1.4 Vp-p (H) 35 PALO. 3 Vp-p (H) 35 MTSC4. 43 0.3 Vp-p (H)
	PAL D. 8 Vp-p (H) O. 85 Vp-p (H) O. 85 Vp-p (H) O. 7 Vp-p (H) AMALOG RGB D. 1. 4 Vp-p (H) S S-V1060 O. 1 Vp-p (H) S S-V1060 O. 2 Vp-p (H) S S-V1060 O. 2 Vp-p (H)	MTSC4.43 Vp-p (H) S-Viosed Vp-p (H) MALOG RGB OO. 7 Vp-p (H) MALOG RGB OO. 7 Vp-p (H) MTSC3.55 Vp-p (H)	ANALOG RGB S-V1860 TLING LING L S-V1860 TLING LING L ANALOG RGB 1.4 Vp-p (H) 39 PALO.3 Vp-p (H) 39 NTSC4.43 Vp-p (H) 36 SECAM O.1 Vp-p (H) 36
	PALO . 8 Vp-p (H) O. 85 Vp-p (H) O. 85 Vp-p (H) O. 77 Vp-p (H) AMALOO RGB Pp-p (H) AMALOO RGB Pp-p (H) S S-VIOED O. 2 Vp-p (H) S NTSC3.55 PVp-p (H)	MTSC4.43 VP-P (H) 3) ANALOGO ROB O. 7 VP-P (H) 3) S-VIDEO 1.3 VP-P (H) 34 ANALOGO ROB 1.4 VP-P (H) 39 ANALOGO ROB 1.4 VP-P (H) 39 ANALOGO ROB 1.5 VP-P (H) 39 ANALOGO ROB 1.4 VP-P (H) 39 ANALOGO ROB 1.3 VP-P (H) 39 ANALOGO ROB 1.4 VP-P (H)	AMALOO RGB 3-V1000 PGB 3-V1000 PGB 1.7 VP-P (H) 33 AMALOO ROB 1.4 VP-P (H) 35 PALO 3 VP-P (H) 35 NTSC4.43 VP-P (H) 36 SECOM 1 VP-P (H)
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	PALO . 8 Vp-p (H) O. 85 Vp-p (H) O. 85 Vp-p (H) O. 77 Vp-p (H) AMALOO RGB Pp-p (H) AMALOO RGB Pp-p (H) S S-VIOED O. 2 Vp-p (H) S NTSC3.55 PVp-p (H)	MTSC4.43 VP-P (H) 3) ANALOGO ROB O. 7 VP-P (H) 3) S-VIDEO 1.3 VP-P (H) 34 ANALOGO ROB 1.4 VP-P (H) 39 ANALOGO ROB 1.4 VP-P (H) 39 ANALOGO ROB 1.5 VP-P (H) 39 ANALOGO ROB 1.4 VP-P (H) 39 ANALOGO ROB 1.3 VP-P (H) 39 ANALOGO ROB 1.4 VP-P (H)	ANALOG RGB S-V1860 TLING LING L S-V1860 TLING LING L ANALOG RGB 1.4 Vp-p (H) 39 PALO.3 Vp-p (H) 39 NTSC4.43 Vp-p (H) 36 SECAM O.1 Vp-p (H) 36
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	PALO . 8 Vp-p (H) O. 85 Vp-p (H) O. 85 Vp-p (H) O. 77 Vp-p (H) AMALOO RGB O. 78 Vp-p (H) O. 1 Vp-p (H) SS S=V10E0 O. 2 Vp-p (H) O. 2 Vp-p (H) O. 2 Vp-p (H) O. 2 Vp-p (H)	MTSC4.43 Vp-p (H) 3) ANALOG ROB O. 7 Vp-p (H) 33 S-VIDEO 1.3 Vp-p (H) 34 ANALOG ROB 0.7 Vp-p (H) 35 ANALOG ROB 0.7 Vp-p (H) 36 PM. 0.3 Vp-p (H) 36 NTSC4.43 Vp-p (H) 36 NTSC4.43 Vp-p (H) 38	ANALOG RGB S-V1860 TLING LING L S-V1860 TLING LING L ANALOG RGB 1.4 Vp-p (H) 39 PALO.3 Vp-p (H) 39 NTSC4.43 Vp-p (H) 36 SECAM O.1 Vp-p (H) 36

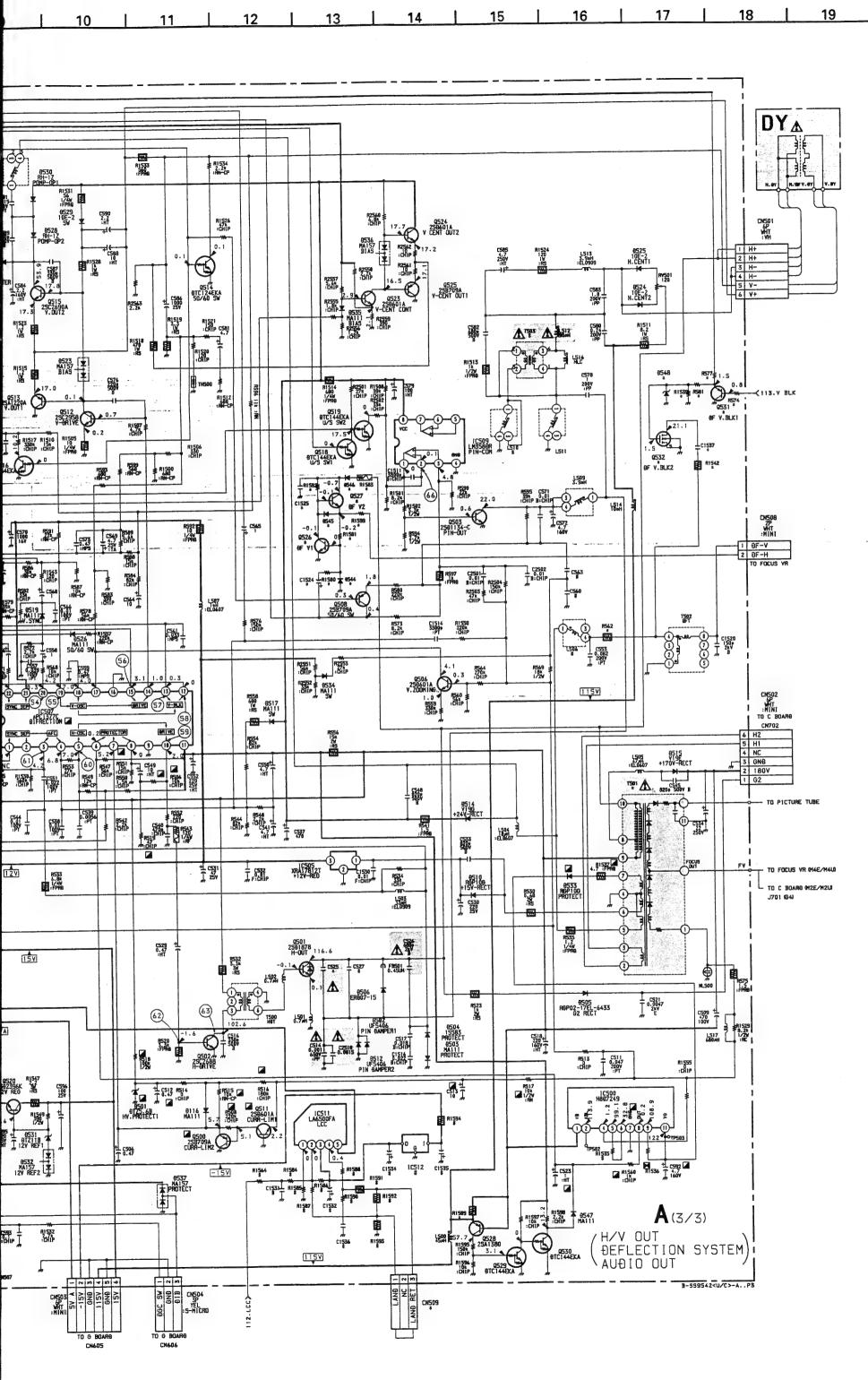


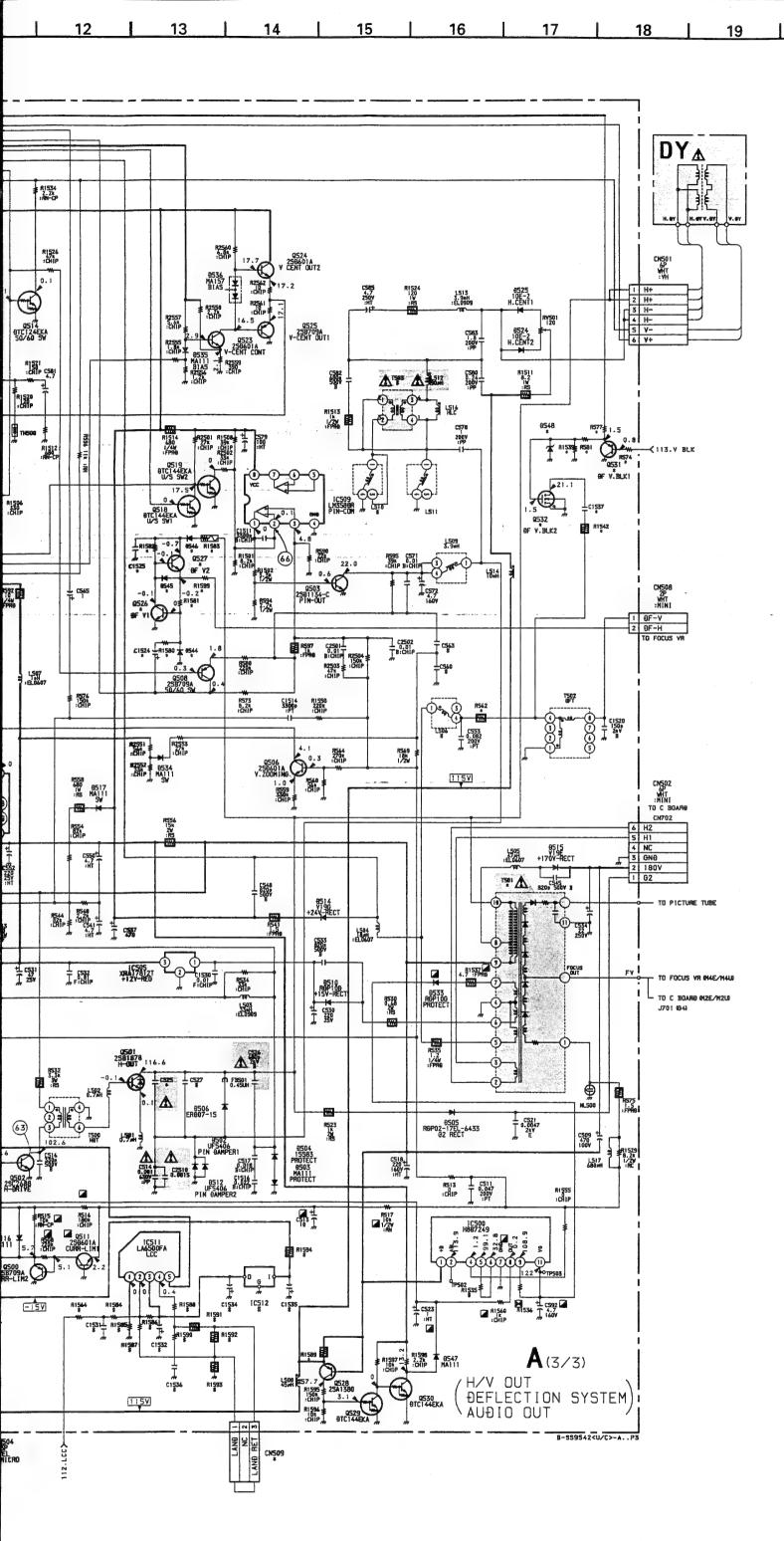


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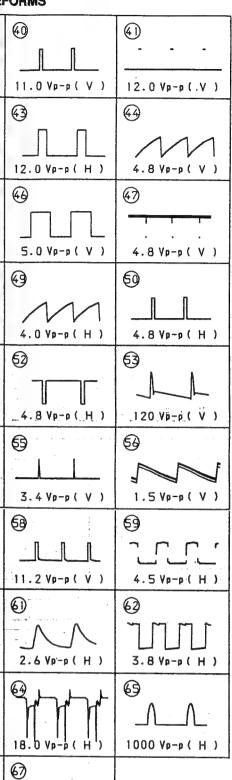




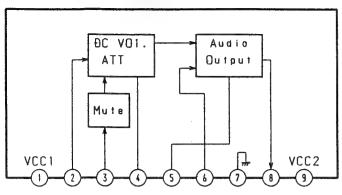
A BOARD WAVEFORMS

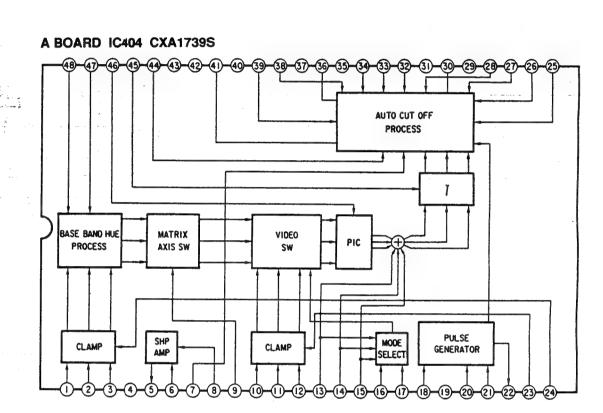
A BOARD WAVEFORMS				
39	60			
0.7 Vp-p (V)	11.0 Vp-p			
@	€3			
10.0 Vp-p(H)	12.0 Vp-p			
(5)	€6			
3.9 Vp-p (V)	5.0 Vp-p			
48	69			
	M			
5.0 Vp-p (V)	4.0 Vp-p (
(1)	1			
111				
4.2 Vp-p (H)	_ 4 . 8 Vp-p			
€9	6			
11.0 Vp-p (V)	3.4 Vp-p			
1	6 8			
5.9 Vp-p (V)	11.2 Vp-p			
60	6			
M	N 1			
3.8 Vp-p(H)	2.6 Vp-p (
63	@			
170 Vp-p (H)	18.0 Vp-p			
69	6			
	WW			
2.4 Vp-p (V)	338 Vp-p (

EFORMS

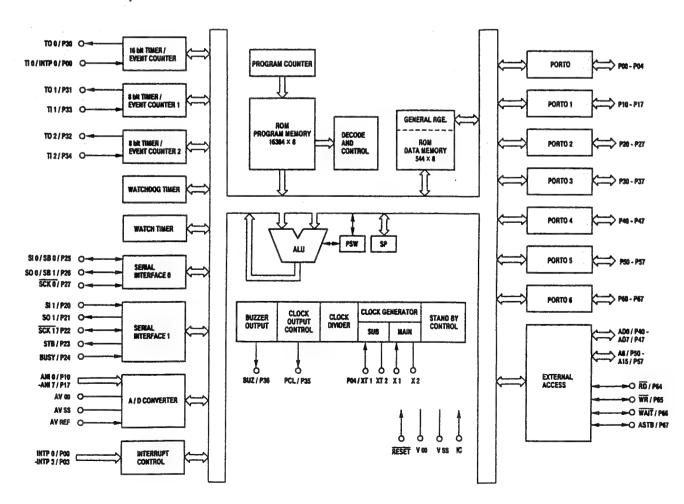


A BOARD IC200 AN5265



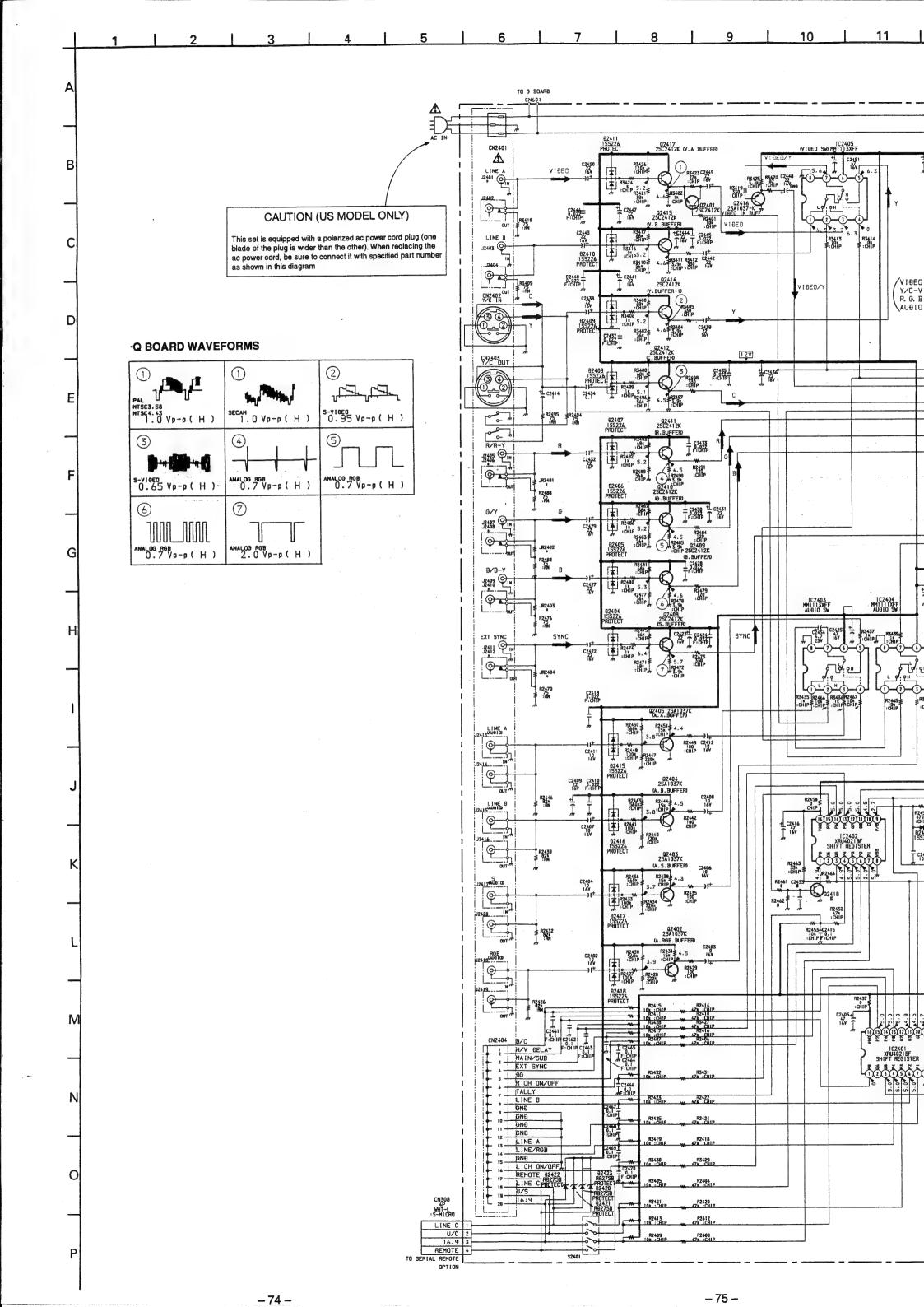


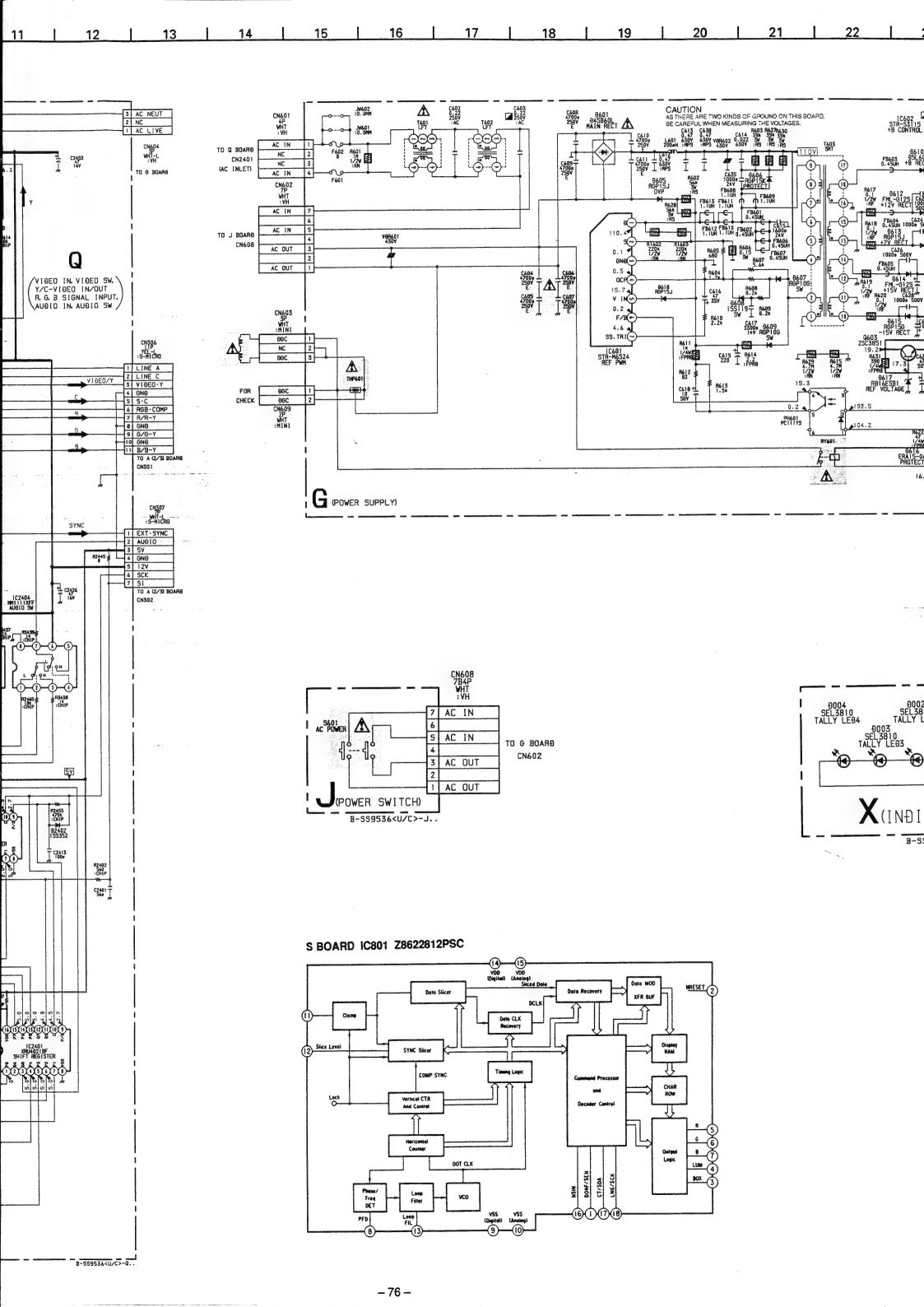
A BOARD IC101 µPD78013YCW

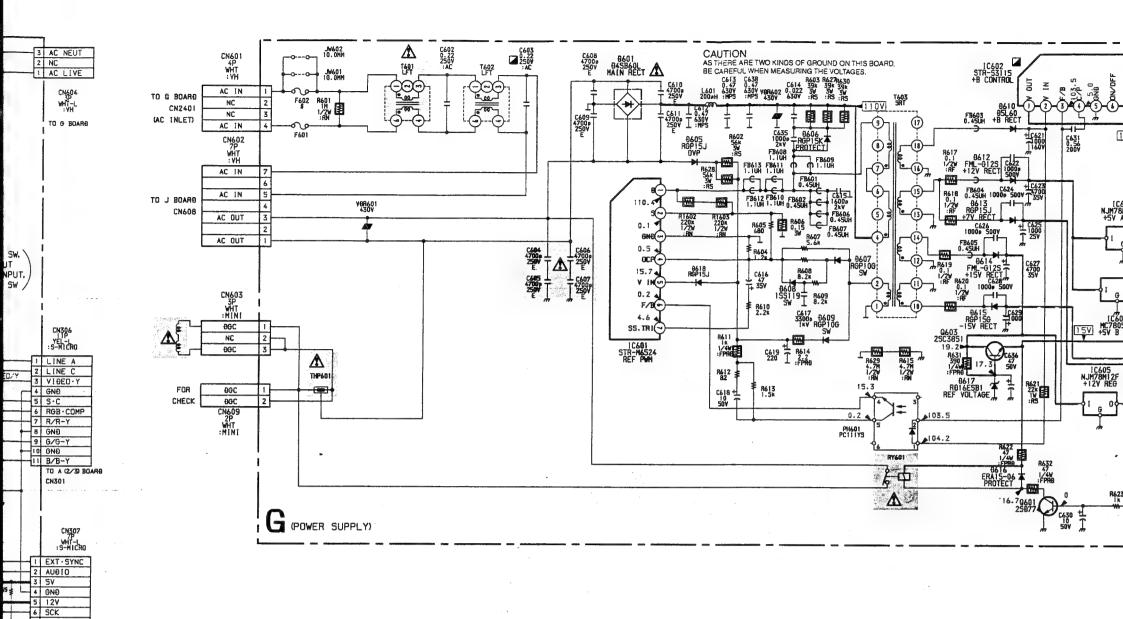


Schematic diagram
GHJ

QXS boards →



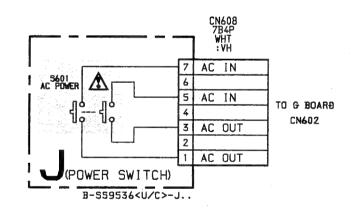




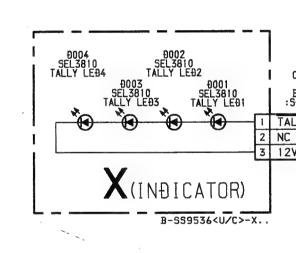
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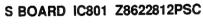
20

21



<u> 16</u>

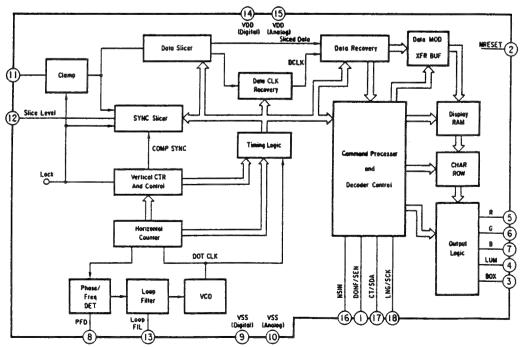


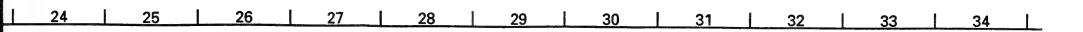


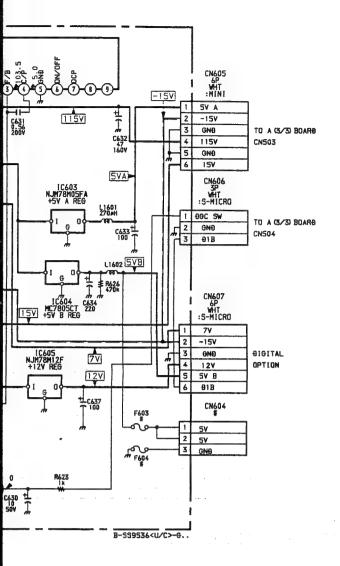
13

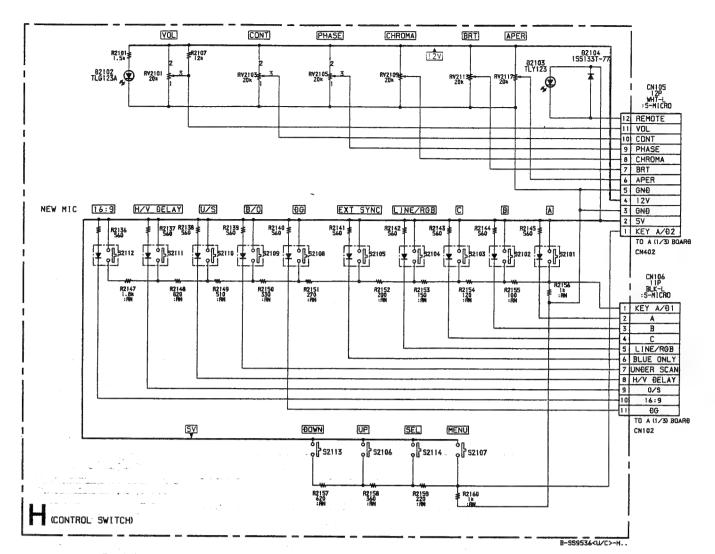
TO A (2/3) BOARD CN302

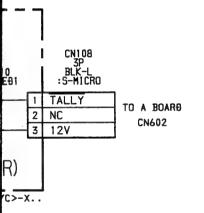
u∕c>-a..

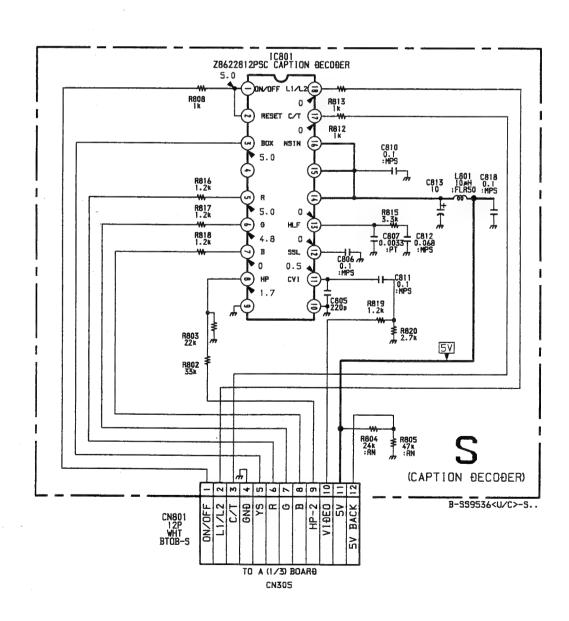






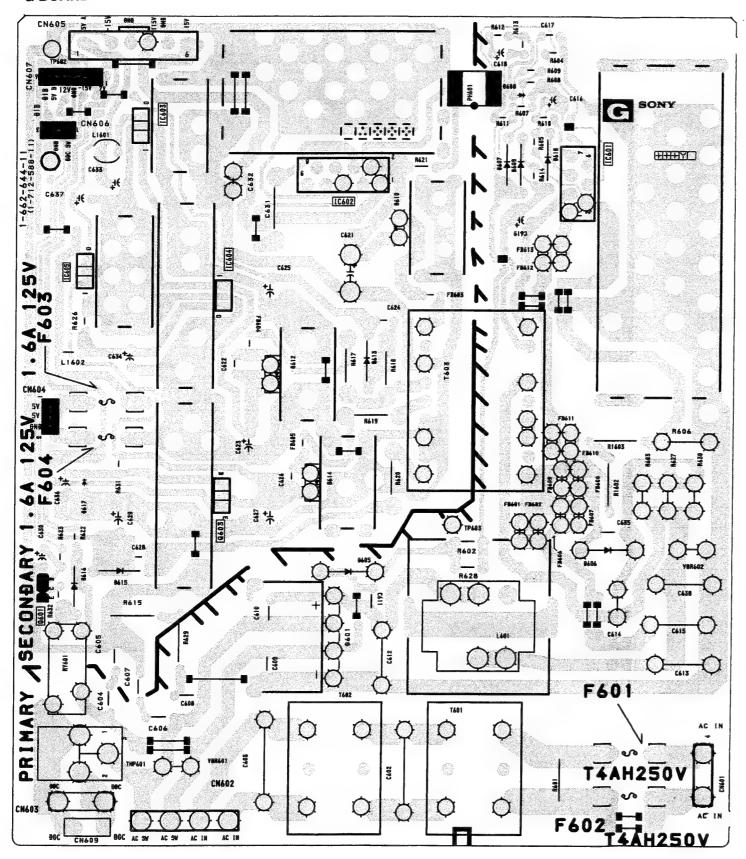




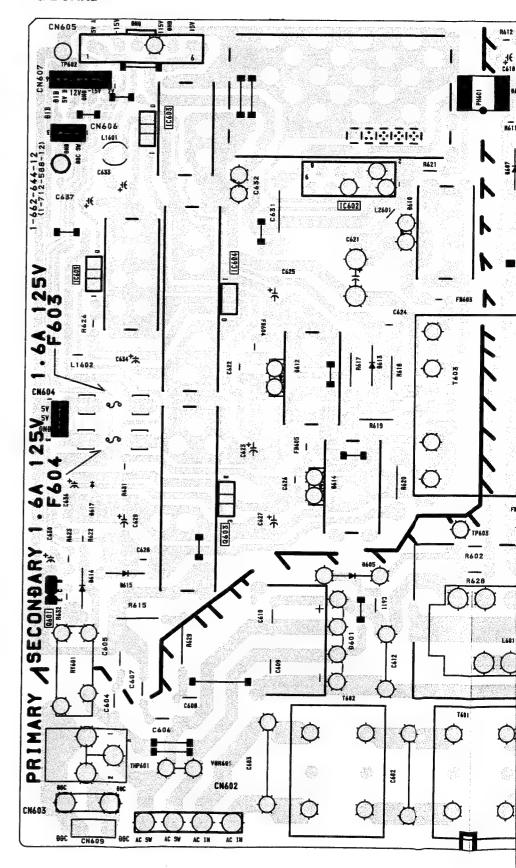




-G BOARD-



-G BOARD-





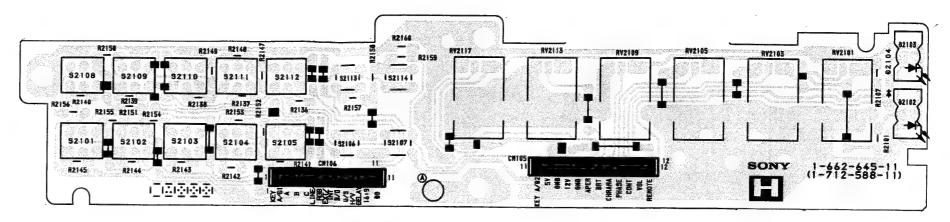








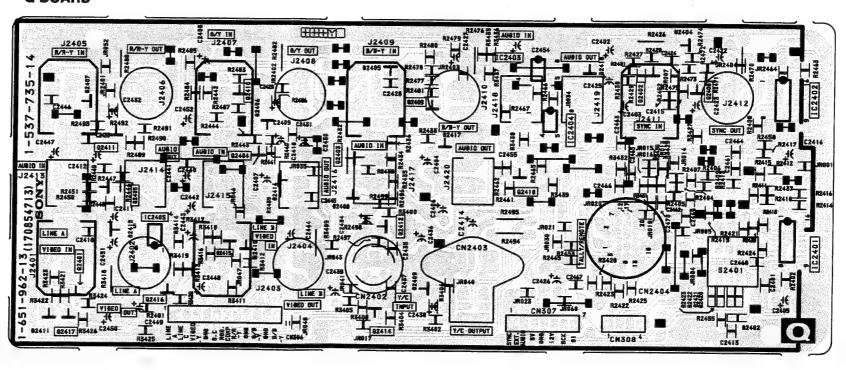
-H BOARD-



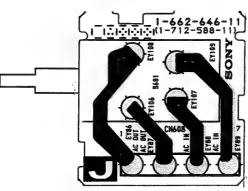
-Q BOARD-

SONY

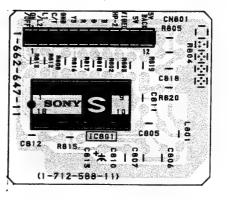
F601



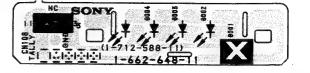
-J BOARD-

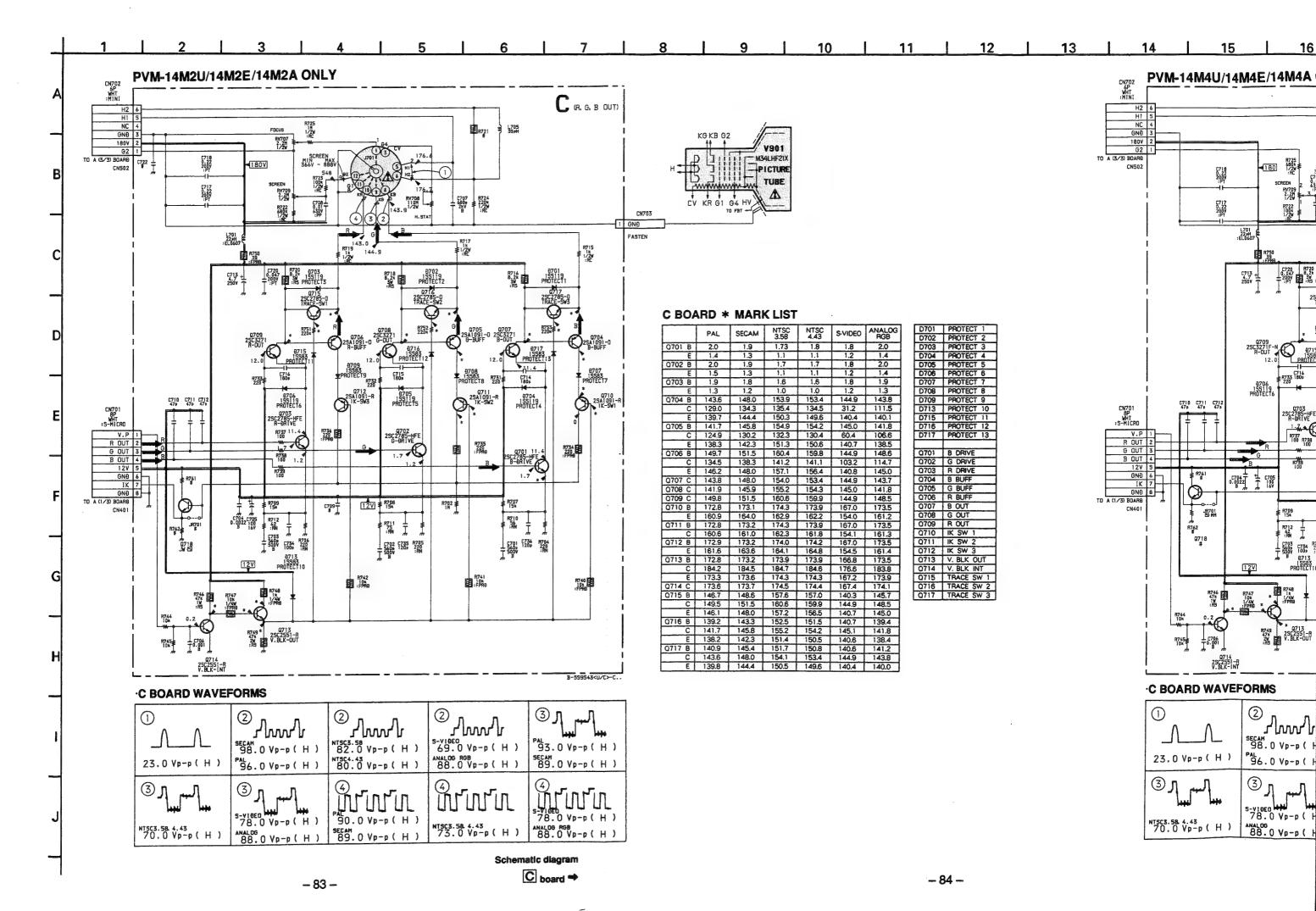


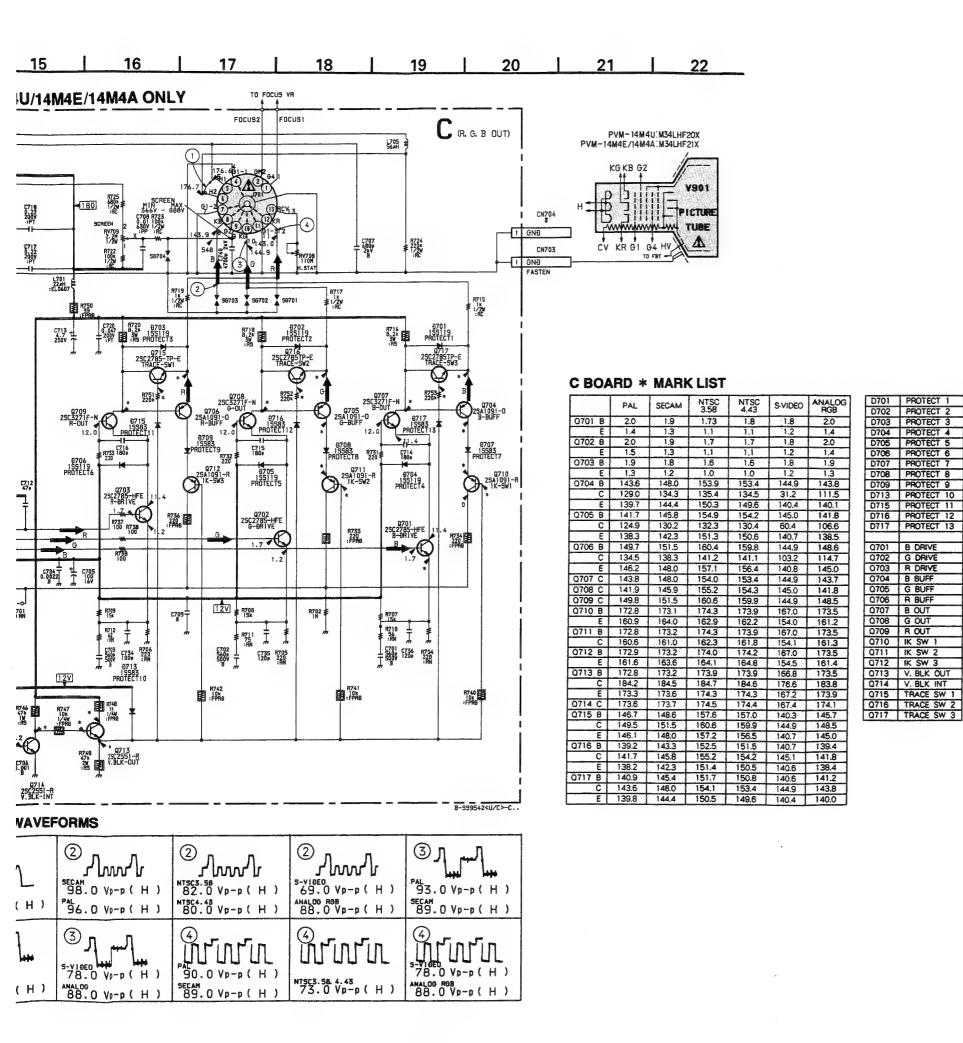
-S BOARD-PVM-14M2U/14M4U ONLY



-X BOARD-

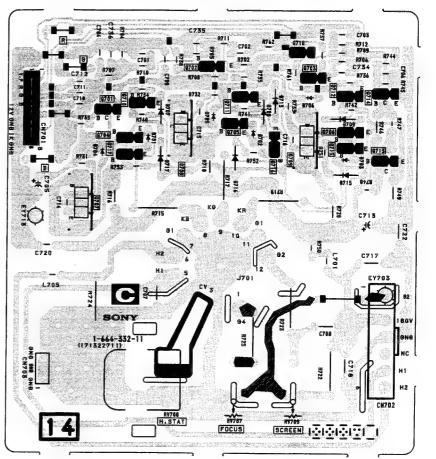




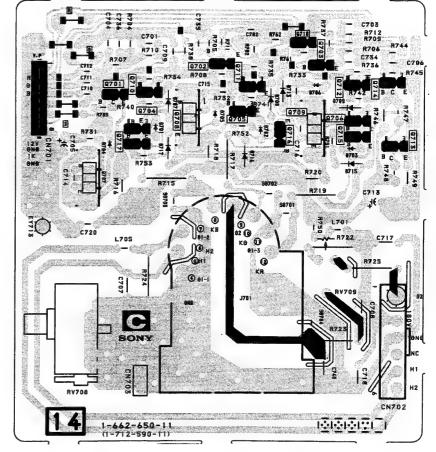


[R.G.B OUT]

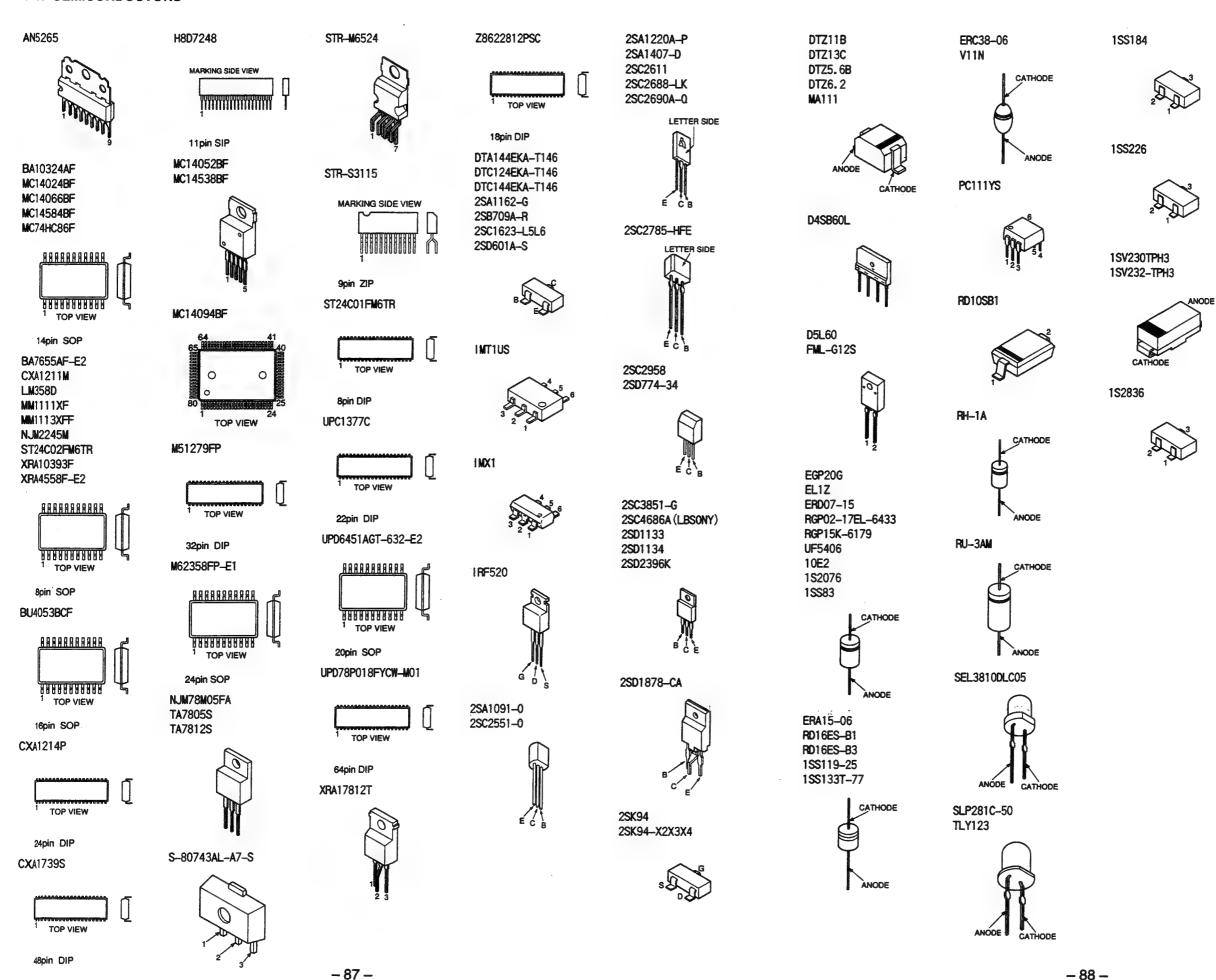
-C BOARD- PVM-14M2U/14M2E/14M2A ONLY



-C BOARD- PVM-14M4U/14M4E/14M4A ONLY



6-5. SEMICONDUCTORS



SECTION 7 EXPLODED VIEWS

(14M4U/E/A)

NOTE:

 Items with no part number and no description are not stocked because they are seldom required for routine service.

▼ : 7-685-881-09

7-1. CHASSIS

●: 7-685-648-79 +BVTP 3X12 ■: 7-682-661-01 +PS 4X8 A: 7-685-646-79 +BVTP 3X8 ◆: 7-685-663-79 +BVTP 4X16

+BVTT 4X8

- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The componants identified by shading and mark ∆ are critical for safety.

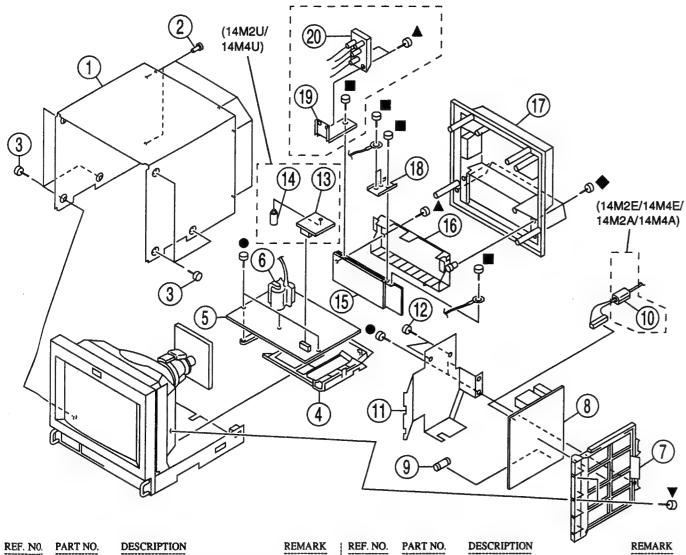
Replace only with part number specified.

Les composants identifies par une trame et une marque Å sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

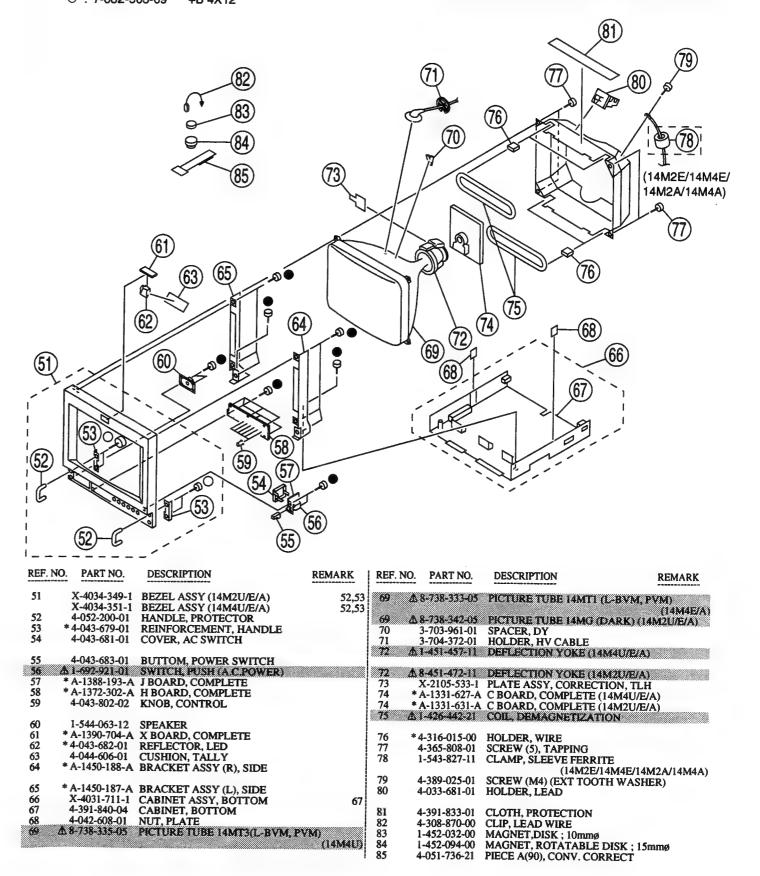
7-2. PICTURE TUBE

● : 7-685-648-79 +BVTP 3X12 ○ : 7-682-563-09 +B 4X12 The componants identified by shading and mark ∆ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque Δ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.



EF. N	PART NO.	DESCRIPTION RE	MARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
1	X-0515-323-0	COVER ASSY, TOP			.1-576-231-11	FUSE (H.B.C.) 4A/2:	
	37 4004 050 1	(14M2U/14M4U/14M2E	/14M4E)	10	1-543-653-11	CORE ASSY, BEAD	
_		COVER ASSY, TOP (14M2A/14M4A)					M2E/14M4E/14M2A/14M4A)
2		RIVET, NYLON			4-057-974-01	SHIELD, G PC BOA	
3	4-847-802-11			12	4-382-854-11	SCREW (M3X10), P,	,SW (+)
4	*4-043-690-01	BRACKET, MAIN					
						S BOARD, COMPLE	
5	*A-1298-002-A	A BOARD, COMPLETE (14M4U/E/A)		14 *	3-687-542-41	SPACER, PC BOARI	D SPACE (14M2U/14M4U)
	*A-1298-006-A	A BOARD, COMPLETE (14M2U/E/A)		15			ASSY, I/O (A) (O BOARD)
6	A 1-453-232-11	TRANSFORMER ASSY, FLYBACK		16	4-043-688-01	PANEL, CONNECTO	OR
		(14)	12U/E/A)	17	4-055-635-01	COVER, REAR	
	A 1-453-233-11	TRANSFORMER ASSY, FLYBACK					
			14U/E/A)	18 *	4-058-363-01	TERMINAL, EARTH	I
7	*4-043-689-01	BRACKET, G		19		BRACKET, FOCUS	
						RESISTOR ASSY (H	
8	*A-1316-302-A	G BOARD, COMPLETE					(14M4U/E/A)
_			Į.	200000000000000000000000000000000000000			······································



SECTION 8 ELECTRICAL PARTS LIST



NOTE:

Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ∆ are critical for safety.
Replace only with part number specified.

- The components identified by in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

When indicating parts by reference number, please include the board name.

RESISTORS

- · All resistors are in ohms
- F : nonflammable
- CAPACITORS PF : μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

						pies	ise include the po	pard name.	•	
REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION		1	REMARK
	* A-1298-002-A	A BOARD, COMPLET			C201	1-137-353-11	MYLAR	0.047MF	10%	100V
		A BOARD, COMPLET	E	-14M4U/E/A) -14M2U/E/A)	C202 C203 C204 C205 C206	1-163-017-00 1-126-963-11 1-126-964-11 1-126-767-11 1-128-526-11	ELECT	0.0047MF 4.7MF 10MF 1000MF 100MF	10% 20% 20% 20% 20%	50V 50V 50V 16V 25V
	4-382-854-11	SCREW (M3X10), P, SW SCREW +PSW 3X8 <band filter="" pass=""></band>	, ,		C207 C208 C209 C300	1-104-665-11 1-126-964-11 1-126-963-11	ELECT ELECT	100MF 10MF 4.7MF	20% 20% 20% 20%	25V 50V 50V 50V
BPF400	1-236-363-11	FILTER, BAND PASS			C301		CERAMIC CHIP		0.25PF	50V
C105	1-163-251-11	<capacitor> CERAMIC CHIP 100PF</capacitor>	5%	50V	C302 C304 C305 C306 C309	1-164-004-11 1-163-259-91 1-163-031-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.1MF 220PF 0.01MF	0.25PF 10% 5%	50V 25V 50V 50V 50V
C106 C114 C115 C116	1-163-031-11 1-163-031-11	CERAMIC CHIP 100PF CERAMIC CHIP 0.01M CERAMIC CHIP 0.01M CERAMIC CHIP 0.01M	7	50V 50V 50V 50V	C310 C311 C312 C313	1-163-809-11 1-126-961-11	CERAMIC CHIP CERAMIC CHIP ELECT CERAMIC CHIP	0.047MF 2.2MF	10% 10% 20%	25V 25V 50V 50V
C117 C118 C119 C121	1-163-259-91 1-165-319-11	CERAMIC CHIP 0.01M CERAMIC CHIP 220PF CERAMIC CHIP 0.1MF CERAMIC CHIP 27PF	5% 5%	50V 50V 50V 50V	C314 C315 C316		CERAMIC CHIP ELECT		5% 20% 20%	50V 50V 25V
C123 C124 C132	1-163-251-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 100PF CERAMIC CHIP 0.001N	5% IF 5%	50V 50V 50V	C317 C318 C319	1-163-231-11 1-126-964-11	CERAMIC CHIP	15PF 10MF	5% 20% 0.25PF	50V 50V
C133 C134 C135	1-163-251-11 1-163-251-11	CERAMIC CHIP 100PF CERAMIC CHIP 100PF CERAMIC CHIP 100PF	5% 5% 5%	50V 50V 50V	C320 C322 C323 C324	1-163-119-00 1-163-231-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	120PF 15PF	5% 5% 5%	50V 50V 50V 50V
C136 C140 C141 C142 C143	1-164-004-11 1-164-161-11 1-163-259-91	CERAMIC CHIP 100PF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.0022 CERAMIC CHIP 220PF CERAMIC CHIP 0.1MF	5% 10% MF 10% 5%	50V 25V 50V 50V 50V	C325 C326 C327 C328	1-126-964-11 1-164-004-11 1-164-004-11		10MF 0.1MF 0.1MF	20% 10% 10%	50V 25V 25V
C144 C145	1-165-319-11 1-165-319-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF		50V 50V	C329 C330	1-163-251-11	CERAMIC CHIP CERAMIC CHIP	100PF	5% 5%	50V 50V 50V
C154 C155 C156	1-163-023-00	CERAMIC CHIP 0.022N CERAMIC CHIP 0.015N CERAMIC CHIP 0.0068	IF 10%	50V 50V 50V	C331 C332 C333 C334	1-164-004-11 1-163-031-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.1MF 0.01MF	5% 10% 5%	50V 25V 50V 50V
C157 C158 C159	1-163-809-11 1-164-344-11	CERAMIC CHIP 0.0068 CERAMIC CHIP 0.047N CERAMIC CHIP 0.068N	IF 10% IF 10%	50V 25V 25V	C335 C336	1-163-141-00 1-104-664-11	CERAMIC CHIP ELECT	0.001MF 47MF	5% 20%	50V 25V
C161 C162 C164		ELECT 47MF CERAMIC CHIP 0.001N CERAMIC CHIP 0.1MF	20% IF 5%	25V 50V	C337 C338 C339	1-163-119-00 1-163-231-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	120PF 15PF	5% 5%	50V 50V 50V
C165 C166 C167 C168	1-165-319-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF ELECT 470MF		50V 50V 25V 10V 10V	C340 C341 C342 C343	1-163-119-00 1-163-018-00 1-163-031-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	120PF 0.0056MF 0.01MF	5% 10%	50V 50V 50V 50V
C169 C171	1-163-251-11	CERAMIC CHIP 0.01M CERAMIC CHIP 100PF	5%	50V 50V	C344 C345	1-163-141-00	CERAMIC CHIP CERAMIC CHIP	0.001MF	5% 5%	50V 50V
C174 C200	1-163-243-11 1-126-963-11	CERAMIC CHIP 47PF ELECT 4.7MF	5% 20%	50V 50V	C346 C347	1-126-960-11 1-163-243-11	ELECT CERAMIC CHIP	1MF 47PF	20% 5%	50V 50V



REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK
C348 C349 C350	1-163-141-00	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.001M CERAMIC CHIP 0.001M		25V 50V 50V	C420 C421 C422 C423	1-164-222-11 1-126-960-11	CERAMIC CHIP 0.0 CERAMIC CHIP 0.0 ELECT 1N CERAMIC CHIP 0.0	22MF MF 20%	25V 25V 50V
C351 C352 C353		ELECT 47MF CERAMIC CHIP 0.01MF CERAMIC CHIP 0.1MF	20%	25V 50V 50V	C424 C426	1-163-809-11	CERAMIC CHIP 0.0	047MF 10%	25V 25V 50V
C354 C355		CERAMIC CHIP 150PF	5% 20%	50V	C427 C428 C429	1-163-031-11 1-104-661-91	CERAMIC CHIP 0.0	01MF 80MF 20%	50V 16V 50V
C356 C357 C358	1-163-031-11	CERAMIC CHIP 0.01MF CERAMIC CHIP 0.01MF	20%	50V 50V	C430 C431		CERAMIC CHIP 0.1		16V 50V
C359 C360 C361		CERAMIC CHIP 0.01MF	20% 10%		C432 C433 C434	1-163-235-11 1-164-004-11	CERAMIC CHIP 0.1 CERAMIC CHIP 22 CERAMIC CHIP 0.1	2PF 5% 1MF 10%	25V 50V 25V
C362 C363 C364	1-163-031-11 1-163-099-00	CERAMIC CHIP 0.01MF CERAMIC CHIP 18PF CERAMIC CHIP 0.01MF	5%	50V 50V 50V	C435 C436 C437	1-164-004-11	CERAMIC CHIP 6P CERAMIC CHIP 0.1 CERAMIC CHIP 0.1	1MF 10%	25V
C365 C366	1-106-343-00		7 10%		C438 C439 C440	1-163-809-11 1-163-809-11	CERAMIC CHIP 0.0 CERAMIC CHIP 0.0 CERAMIC CHIP 0.1	047MF 10% 047MF 10%	25V 25V 25V 25V
C367 C368 C369	1-163-031-11 1-124-261-00 1-164-298-11	CERAMIC CHIP 0.01MF ELECT 10MF CERAMIC CHIP 0.15MF	20% 10%	50V 50V	C441 C442	1-126-962-11		3MF 20%	50V 25V
C370 C371 C372	1-104-664-11	ELECT 47MF	20% 20%	25V	C443 C444 C445	1-165-319-11	CERAMIC CHIP 47 CERAMIC CHIP 0.1 CERAMIC CHIP 0.0	1MF	50V 50V 25V
C373 C374 C375	1-163-141-00 1-126-960-11	CERAMIC CHIP 0.01MF CERAMIC CHIP 0.001MI ELECT 1MF CERAMIC CHIP 220PF	5% 20% 5%	50V 50V 50V 50V	C446 C447 C448	1-163-263-11	CERAMIC CHIP 6P CERAMIC CHIP 33 CERAMIC CHIP 47	OPF 5%	PF 50V 50V 50V
C376 C377	1-126-959-11		20%	50V 25V	C449 C450	1-163-227-11	CERAMIC CHIP 10 CERAMIC CHIP 0.0	PF 0.5P	
C378 C379 C380		CERAMIC CHIP 0.047MI CERAMIC CHIP 0.01MF ELECT 1000MF		50V	C451 C452 C453	1-163-263-11 1-164-004-11	CERAMIC CHIP 0.1 CERAMIC CHIP 33 CERAMIC CHIP 0.1	0PF 5% 1MF 10%	25V 50V 25V
C381 C382 C383		CERAMIC CHIP 0.01MF CERAMIC CHIP 47PF ELECT 47MF	5% 20%	50V 50V 25V	C454 C455	1-163-263-11	CERAMIC CHIP 47 CERAMIC CHIP 33	10PF 5%	50V 50V
C384 C385		CERAMIC CHIP 82PF	5% 20%	50V	C456 C457 C458 C459	1-164-004-11 1-163-249-11	CERAMIC CHIP 6P CERAMIC CHIP 0.1 CERAMIC CHIP 82 CERAMIC CHIP 0.1	IMF 10% PF 5%	PF 50V 25V 50V 50V
C386 C387 C388	1-124-261-00	CERAMIC CHIP 0.001MI ELECT 10MF	20% 5 5% 20%		C460 C461	1-164-004-11	CERAMIC CHIP 0.1 CERAMIC CHIP 12	1MF 10%	25V 50V
C389 C390		CERAMIC CHIP 47PF	20% 5%	25V 50V	C462 C463 C464	1-164-004-11 1-164-004-11 1-164-299-11	CERAMIC CHIP 0.1 CERAMIC CHIP 0.2 CERAMIC CHIP 0.2	1MF 10% 1MF 10% 22MF 10%	25V 25V 25V
C391 C392 C393 C394		CERAMIC CHIP 0.15MF CERAMIC CHIP 0.15MF	20% 10% 10% 20%	25V 25V 25V 25V	C465	1-163-119-00	CERAMIC CHIP 15	OPF 5%	50V
C395	1-163-235-11	CERAMIC CHIP 22PF CERAMIC CHIP 0.22MF	5% 10%	50V 25V	C467 C469 C470 C471	1-163-037-11 1-163-243-11	CERAMIC CHIP 12 CERAMIC CHIP 0.0 CERAMIC CHIP 47 CERAMIC CHIP 33	022MF 10% PF 5%	50V 50V 50V 50V
C397 C398 C399	1-104-664-11 1-104-664-11 1-104-664-11	ELECT 47MF ELECT 47MF ELECT 47MF	20% 20% 20%	25V	C472 C473	1-163-031-11	CERAMIC CHIP 0.0 CERAMIC CHIP 0.0	01MF	50V 50V
C400 C401	1-164-346-11	CERAMIC CHIP 1MF	10%	25V 16V	C475 C476 C477	1-163-031-11 1-163-031-11	CERAMIC CHIP 0.0 CERAMIC CHIP 0.0 CERAMIC CHIP 0.2	01MF 01MF	50V 50V 25V
C402 C403 C406 C407	1-126-967-11 1-164-232-11 1-126-965-11 1-104-664-11	CERAMIC CHIP 0.01 MF ELECT 22MF	20% 10% 20% 20%	50V 50V 50V 25V	C478 C479		CERAMIC CHIP 15		50V 50V
C408 C409	1-164-232-11	CERAMIC CHIP 0.01MF CERAMIC CHIP 0.01MF	10%	50V 50V	C482 C483 C484		CERAMIC CHIP 68		10V 50V 50V
C410 C411 C414	1-126-965-11 1-164-004-11		20% 10%	50V 25V 50V	C485 C486 C487	1-163-249-11	CERAMIC CHIP 68 CERAMIC CHIP 82 CERAMIC CHIP 22	PF 5%	50V 50V 50V
C415 C416		CERAMIC CHIP 0.01MF	20% 10%	50V 50V	C490 C491	1-164-336-11 1-164-336-11	CERAMIC CHIP 0.3 CERAMIC CHIP 0.3	33MF 33MF	25V 25V
C417 C418 C419		CERAMIC CHIP 0.01MF CERAMIC CHIP 0.0033M ELECT 470MF	10% IF 10% 20%	50V 50V 10V	C492 C493 C494 C495	1-104-760-11	CERAMIC CHIP 0.3 CERAMIC CHIP 0.4 CERAMIC CHIP 0.4 ELECT 10	047MF 10%	25V 50V 25V 50V

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque Å sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.



REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
C496 C497		CERAMIC CHIP		5%	50V	C565 C566	1-126-960-11 1-137-150-11	MYLAR	1MF 0.01MF	20% 10%	50V 100V
C498	1-126-961-11	CERAMIC CHIP ELECT	2.2MF	10% 20%	50V 50V	C567	1-136-499-11	FILM	0.047MF	5%	50V
C499		CERAMIC CHIP		100	50V	C568	1-126-960-11		1MF	20%	50V
C500 C501		CERAMIC CHIP CERAMIC CHIP		10% 10%	25V 50V	C569 C570	1-131-351-00 1-126-767-11	TANTALUM	4.7MF 1000MF	10% 20%	25V 16V
CIEOO						C571	1-164-232-11	CERAMIC CHIP		10%	50V
C502 C503		CERAMIC CHIP		5% 5%	50V 50V	C572	1-104-709-11	ELECT	4.7MF	0	160V
C504	1-136-495-11	FILM	0.068MF	5%	50V	C573	1-136-173-00		0.47MF	5%	50V
C505 C506	1-163-199-00 1-126-959-11	CERAMIC CHIP	560PF 0.47MF	5% 20%	50V 50V	C575	1-163-031-11	CERAMIC CHIP		100	50V
			0.47MI		304	C576 C577	1-102-244-00 1-107-906-11		220PF 10MF	10% 20%	500V 50V
C507 C508	1-128-526-11 1-130-497-00		100MF 0.15MF	20% 5%	25V 50V	C578	1-136-112-00	FILM	1.4MF	5%	200V
C509	1-128-566-11		470MF	20%	100V	C579	1-107-910-11	ELECT	100MF	20%	50V
C511 C512	1-107-368-11 1-126-959-11		0.047MF	10%	200V	C580	1-136-756-11	FILM	0.24MF	5%	200V
C312	1-120-939-11	ELECT	0.47MF	20%	50V	C581 C582	1-126-963-11 1-102-002-00		4.7MF 680PF	20% 10%	50V 500V
C513	1-124-261-00		10MF	20%	50V	C583	1-136-828-11		1.8MF	5%	200V
C514 4	MI-129-715-91	PHLM	0.012MF	10%	630V 4M4U/E/A)	C584	1-107-949-11	FIECT	2.2MF	20%	160V
C514 4	1-130-338-91	FILM	0.01MF	5%	630V	C585	1-107-960-11	ELECT	4.7MF	20%	250V
C515	1-163-809-11	CERAMIC CHIP	0.047MF	10%	4M2U/E/A) 25V	C586 C587	1-126-942-61 1-102-030-00		1000MF 330PF	20%	25V
C516	1-102-030-00		330PF	10%	500V	C588	1-107-906-11		10MF	10% 20%	500V 50V
C517	1-163-024-00	CERAMIC CHIP	0.018MF	10%	50V	C589	1-102-030-00	CEDANGC	22000	100	£0017
C518	1-107-947-11	ELECT	220MF	20%	160V	C590	1-102-030-00		330PF 2.2MF	10% 20%	500V 50V
C519 C520		CERAMIC CHIP		10% 5%	50V 50V	C591	1-107-365-91		0.015MF	10%	200V
C521	1-162-114-00		0.0047MF	370	2KV	C592 C593	1-107-635-11 1-165-319-11	CERAMIC CHIP	4.7MF 0.1MF	20%	160V 50V
C522	1-126-768-11	EI ECT	2200145	200	160						
C523	1-107-902-11		2200MF 1MF	20% 20%	16V 50V	C594 C595	1-103-229-11	CERAMIC CHIP	12PF 220MF	5% 20%	50V 25V
C525 &	1-136-080-11	FILM	0.011MF	3%	2KV	C596	1-104-665-11	ELECT	100MF	20%	25V
C525 A	1-136-079-11	FILM	0.01MF	3%	4M4U/E/A) 2KV	C597 C598		CERAMIC CHIP CERAMIC CHIP			16V 16V
C526 A	1 167 116 01	CEDANIC	EOADE		4M2U/E/A)						
U020 2	1-162-116-91	CERAMIC	680PF	10%	2KV	C599 C1300	1-124-261-00 1-104-664-11		10MF 47MF	20% 20%	50V 25V
C527	1-162-134-11	CERAMIC	470PF	10%	2KV	C1301	1-104-664-11	ELECT	47MF	20%	25V
C529	1-107-901-11	ELECT	0.47MF	20%	4M2U/E/A) 50V	C1302 C1304	1-163-133-00 1-104-664-11	CERAMIC CHIP	470PF 47MF	5% 20%	50V 25V
C530 C531	1-104-666-11		220MF	20%	25V						
C532	1-104-664-11 1-163-031-11	CERAMIC CHIP	47MF 0.01MF	20%	25V 50V	C1305 C1306	1-104-664-11	ELECT CERAMIC CHIP	47MF	20%	25V 50V
C533	1 100 010 00	CEDANGE	00000	100		C1307	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C534	1-102-212-00 1-107-662-11		820PF 22MF	10% 20%	500V 250V	C1308 C1309	1-126-933-11	ELECT CERAMIC CHIP	100MF	20% 5%	10V 50V
C537	1-126-971-11		470MF	20%	50V					5 10	
C538 C539	1-137-150-11 1-130-480-00		0.01MF 0.0056MF	10% 5%	100V 50V	C1310 C1311	1-163-031-11 1-104-664-11	CERAMIC CHIP ELECT		20%	50V 25V
C540	1 162 122 00	CERAMIC CHIP	470DE	e or	5011	C1312	1-163-031-11	CERAMIC CHIP	0.01MF	2010	50V
C541	1-103-133-00		4.7MF	5% 20%	50V 50V	C1313 C1314	1-163-031-11 1-104-664-11	CERAMIC CHIP	0.01MF 47MF	20%	50V 25V
C542	1-136-481-11		0.0022MF	10%	100V					2010	
C543 C544	1-136-481-11 1-137-150-11		0.0022MF 0.01MF	10%	100V 100V	C1315 C1316	1-104-664-11	ELECT CERAMIC CHIP	47MF	20%	25V 50V
Cell						C1317	1-104-664-11	ELECT	47MF	20%	25V
C545 C546	1-102-212-00 1-163-119-00	CERAMIC CHIP	820PF 120PF	10% 5%	500V 50V	C1318 C1319	1-104-664-11	ELECT CERAMIC CHIP	47MF	20% 10%	25V 50V
C547	1-163-251-11	CERAMIC CHIP	100PF	5%	50V				0.0221411	1070	204
C548 C549	1-102-212-00 1-107-906-11		820PF 10MF	10% 20%	500V 50V	C1320 C1321	1-104-664-11 1-104-664-11		47MF	20%	25V
						C1322	1-126-934-11	ELECT	47MF 220MF	20% 20%	25V 16V
C550 C551	1-107-905-11 1-106-375-12		4.7MF 0.022MF	20% 10%	50V 100V	C1323 C1324		CERAMIC CHIP			50V
C552	1-107-889-11	ELECT	220MF	20%	25V		1-102-031-11	CERAMIC CHIP	U.UIMP		50V
C553	1-106-389-00	MYLAR	0.082MF	10%	200V 4M4U/E/A)		1-163-031-11 1-104-664-11	CERAMIC CHIP		2007	50V
C554	1-130-736-11	FILM	0.01MF	5%	50V	C1327	1-163-031-11	CERAMIC CHIP		20%	25V 50V
C555	1-126-964-11	ELECT	10MF	20%	50V	C1328 C1329	1-163-031-11	CERAMIC CHIP	0.01MF	200	50V
C556	1-126-964-11	ELECT	10MF	20%	50V		1-126-964-11		10MF	20%	50V
C557 C558	1-106-381-12 1-126-960-11			10% 20%	100V 50V	C1330 C1331	1-163-031-11	CERAMIC CHIP		200	50V
C559	1-136-173-00			5%	50V	C1332	1-104-664-11 1-104-664-11	ELECT	47MF 47MF	20% 20%	25V 25V
C561	1-136-159-00	FILM	0.033MF	5%	50V		1-104-664-11	ELECT	47MF	20%	25V
C564	1-126-964-11			20%	50V	C1334	1-103-221-11	CERAMIC CHIP	IUPP	0.5PF	50V
					;						



REF. NO.	PART NO.	DESCRIPTION		Ī	REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
C1335 C1336	1-104-664-11 1-104-664-11		47MF 47MF	20% 20%	25V 25V	C1515	1-126-964-11	ELECT	10MF	20%	50V
C1338 C1339 C1340	1-163-031-11	CERAMIC CHIP	0.01MF		50V 50V	C1516 C1517	1-128-526-11		100MF	10% 20%	50V 10V
C1340		CERAMIC CHIP		5%	50V 50V	C1518 C1520	1-107-909-11 1-162-129-00		47MF 150PF	20% 10%	16V 2KV (14M4U/E/A)
C1342 C1343	1-163-105-00 1-163-113-00	CERAMIC CHIP CERAMIC CHIP	33PF 68PF	5% 5%	50V 50V	C1521	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1344 C1345	1-163-083-00 1-124-261-00	CERAMIC CHIP ELECT	1PF 10MF	0.25PF 20%	50V 50V	C1524	1-107-910-11		100MF		50V (14M4U/E/A)
C1346 C1347	1-124-589-11 1-163-031-11	ELECT CERAMIC CHIP	47MF	20%	16V 50V	C1525 C1530	1-162-114-00	CERAMIC CHIP	0.0047MF		2KV [14M4U/E/A) 50V
C1348 C1349	1-163-127-00 1-163-117-00	CERAMIC CHIP CERAMIC CHIP	270PF 100PF	5% 5%	50V 50V	C1537	1-130-783-00		0.33MF	10%	100V 14M4U/E/A)
C1350 C1351		CERAMIC CHIP		10%	50V	C1538	1-102-074-00		0.001MF	10%	50V
C1351 C1352 C1353		CERAMIC CHIP		20% 10%	50V 50V 50V	C2501 C2502 C2510		CERAMIC CHIP CERAMIC CHIP FILM		10% 10%	50V 50V 630V
C1354 C1355	1-163-121-00	CERAMIC CHIP CERAMIC CHIP	150PF	5% 5%	50V 50V				0.00151/11		14M2U/E/A)
C1356 C1357	1-163-235-11 1-104-661-91	CERAMIC CHIP	22PF 330MF	5% 20%	50V 16V	# # # # # # # # # # # # # # # # # # #		<connector></connector>			
C1358 C1359	1-124-589-11		47MF	20% 5%	16V 50V	CN101 CN102	*1-573-979-11 *1-564-514-11	CONNECTOR, B PLUG, CONNEC	OARD TO	BOAR	D 11P
C1360		CERAMIC CHIP			50V	CN104 CN105	* 1-564-506-11 * 1-565-503-11	PLUG, CONNEC CONNECTOR, B	TOR 3P OARD TO	BOAR	D 12P
C1362 C1363 C1364	1-163-235-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	22PF	5% 5% 5%	50V 50V 50V	CN201 CN301		PLUG, CONNEC			
C1365 C1366		CERAMIC CHIP		0.5PF 20%	50V 25V	CN302 CN303	*1-564-510-11	PLUG, CONNEC CONNECTOR, B	TOR 7P	BOAR	D 12P
C1367	1-104-664-11		47MF	20%	25V	CN305 CN401	1-779-070-21	PIN, CONNECTO PLUG, CONNEC	OR 12P		
C1369 C1370 C1372		CERAMIC CHIP CERAMIC CHIP ELECT		5% 5% 20%	50V 50V 25V	CN402 CN501		PLUG, CONNEC CONNECTOR PI			
C1373	1-104-664-11	ELECT	47MF	20%	25V	CN502 CN503	*1-573-964-11	PIN, CONNECTO PIN, CONNECTO	OR (PC BO		
C1374 C1375 C1378	1-104-664-11 1-126-963-11		47MF 4.7MF	20% 20% 5%	25V 50V 50V	CN504 CN505		PLUG, CONNEC			
C1380 C1381	1-163-163-00	CERAMIC CHIP CERAMIC CHIP	18PF	5% 5%	50V 50V	CN507 CN508	1-695-915-11	PLUG, CONNECT TAB (CONTACT PIN, CONNECT)	")	ARD) (2P
C1382	1-126-933-11		100MF	20%	10V	2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		,			14M4U/E/A)
C1383 C1384 C1385		CERAMIC CHIP		20%	25V 25V 50V			<composition< td=""><td>CIRCUIT</td><td>BLOC</td><td>K></td></composition<>	CIRCUIT	BLOC	K>
C1386	1-163-031-11	CERAMIC CHIP	0.01MF		50V	CP300 CP301		MODULE, TRAP			
C1387 C1388 C1393	1-163-229-11	CERAMIC CHIP	12PF	5%	50V 50V	CP302 CP303	1-808-654-21 1-466-162-61	MODULE FILTER BLOCK,	COM (CF	B-4)	
C1400 C1401		CERAMIC CHIP CERAMIC CHIP FILM		5% 5%	50V 50V 50V			<diode></diode>			
C1402	1-163-031-11	CERAMIC CHIP	0.01MF		50V	D100		DIODE MA111			
C1403 C1404 C1405		FILM CERAMIC CHIP CERAMIC CHIP		5% 10% 5%	50V 25V	D101 D102	8-719-800-76	DIODE 1SS226 DIODE 1SS226	DIII		
C1406		CERAMIC CHIP		0.25PF	50V 50V	D103 D104		DIODE 1SV230T DIODE 1SS226	PH3		
C1407 C1408	1-163-113-00	CERAMIC CHIP CERAMIC CHIP	68PF	0.25PF 5%	50V	D105 D107	8-719-800-76	DIODE 1SS226 DIODE 1SS226			
C1500 C1501 C1505	1-126-768-11 1-126-925-11 1-136-165-00	ELECT	2200MF 470MF 0.1MF	20% 20% 5%	16V 10V 50V	D108 D109 D111	8-719-801-78	DIODE 1S2836 DIODE 1SS184			
C1506	1-104-661-91	ELECT	330MF	20%	16V	D111		DIODE DTZ6.2 DIODE MA111			
C1507 C1508	1-163-141-00 1-126-963-11	CERAMIC CHIP ELECT	0.001MF 4.7MF	5% 20%	50V 50V	D115 D116	8-719-977-05 8-719-404-49	DIODE DTZ6.2 DIODE MA111			
C1509 C1510	1-126-964-11 1-126-963-11		10MF 4.7MF	20% 20%	50V 50V	D200 D300		DIODE DTZ13C DIODE 1SV232-7	ГРН3		
C1511 C1512	1-126-963-11		4.7MF	20%	50V 50V	D301 D303	8-719-977-05	DIODE MA111 DIODE DTZ6.2			
C1513 C1514	1-163-197-00 1-130-477-00	CERAMIC CHIP MYLAR	470PF 0.0033MF	5% 5%	50V 50V	D304 D305		DIODE 1SS184 DIODE 1SS226			



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
D307	8-719-404-49	DIODE MA111	,	D516		DIODE MA111	
D308 D309		DIODE MA111 DIODE MA111		D517 D518		DIODE MA111 DIODE MA111	
D 310	8-719-104-34	DIODE 1S2836		D519		DIODE MA111	
D311 D313		DIODE 1SV230TPH3 DIODE 1SS184		D520 D521		DIODE 1SS184 DIODE MA111	
D314		DIODE MA111		D522 D523		DIODE DTZ6.2 DIODE 1S2076	
D315 D317	8-719-404-49	DIODE MA111 DIODE MA111		D524	8-719-200-02	DIODE 10E-2	
D320 D322		DIODE MA111 DIODE MA111		D525 D526	8-719-200-02	DIODE 10E-2 DIODE MA111	
D323	8-719-404-49	DIODE MA111		D527 D528	8-719-200-02	DIODE 10E-2 DIODE RH-1A	
D324 D325		DIODE 1SV230TPH3 DIODE 1SS184		D529		DIODE 10E-2	
D326 D327	8-719-045-70	DIODE 1SV230TPH3 DIODE 1S2836		D530 D531	8-719-300-76	DIODE RH-1A DIODE DTZ11B	
D332		DIODE MA111	1	D532 D533	8-719-800-76	DIODE 1SS226	
D333 D335	8-719-404-49	DIODE MAIII DIODE MAIII				DIODE EL1Z	
D336	8-719-404-49	DIODE MA111	1 1 1 1	D534 D535	8-719-404-49	DIODE MA111 DIODE MA111	
D337		DIODE MAIII	0 0 0 0	D536 D537	8-719-800-76	DIODE 1SS226 DIODE 1SS226	
D338 D339	8-719-404-49	DIODE MA111 DIODE MA111		D538	8-719-800-76	DIODE 1SS226	
D344 D345	8-719-104-34	DIODE 1SS184 DIODE 1S2836		D539 D540		DIODE 1S2076 DIODE MA111	
D346	8-719-104-34	DIODE 1S2836	İ	D541 D542		DIODE 1SS184 DIODE MA111	
D347 D360		DIODE 1S2836 CONDUCTOR, CHIP	9	D543		DIODE MA111	
D361 D362	1-216-295-91	CONDUCTOR, CHIP DIODE RD10SB1	8 6 6 6	D544 D545	8-719-404-49 8-719-404-49	DIODE MA111 (14M4U/E/A) DIODE MA111 (14M4U/E/A)	
D363		DIODE RD10SB1		D546 D547	8-719-901-19	DIODE V11N (14M4U/E/A) DIODE MA111	
D364 D365		DIODE 1S2836 DIODE MA111		D548		DIODE RD16ESB3 (14M4U/E/A)	
D381 D401	8-719-404-49	DIODE MAIII DIODE MAIII				<delay line=""></delay>	
D404		DIODE 1SS226		DL300	1.415.622.11	DELAY LINE, Y	
D405 D406		DIODE 1SS184 DIODE MA111		DL301 DL401	1-415-632-11	DELAY LINE, Y	
D407 D408	8-719-404-49	DIODE MA111 DIODE MA111		DL401	1-409-347-11	DELAY LINE	
D410		DIODE MAIII				<ferrite bead=""></ferrite>	
D411 D414		DIODE MA111 DIODE 1SS184		FB501	1-410-396-41	FERRITE BEAD INDUCTOR 0.45	UH
D415 D416	8-719-801-78	DIODE 1SS184					
D417		DIODE 1SS184 DIODE 1SS184				<filter></filter>	
D418		DIODE 188184	İ	FL300 FL401	1-236-547-11 1-236-364-11	TRAP, LC FILTER, BAND PASS	
D421 D422	8-719-404-49	DIODE MA111 DIODE MA111					
D423 D424		DIODE 1SS226 DIODE MA111				<ic></ic>	
D425		DIODE 1SS226		IC101 IC101	1-540-044-11 8-759-462-05	SOCKET, IC IC uPD78P018FYCW-M01	
D427 D500	8-719-404-49	DIODE MA111 DIODE MA111		IC102 IC103	8-759-354-28	IC ST24C02FM6TR IC MC74HC86F	
D501 D502		DIODE DTZ5.6B DIODE UF5406		IC104		IC uPD6451AGT-632-E2	
D503	8-719-404-49	DIODE MA111		IC105 IC106		IC M62358FP-E1 IC M62358FP-E1	
D504 D505		DIODE 1SS83 DIODE RGP02-17EL-6433		IC107 IC108	8-759-196-70	IC M62358FP-E1 IC S-80743AL-A7-S	
D506 D507	8-719-033-83	DIODE ERD07-15 DIODE 1SS226		IC109		IC M62358FP-E1	
D508		DIODE 188226		IC110 IC111		IC M62358FP-E1	
D509 D510		DIODE MAIII		IC112	8-759-354-27	IC MC14094BF IC ST24C01FM6TR	
D512 D513	8-719-979-80	DIODE UF5406 DIODE MA111		IC200 IC301	8-759-420-04 8-752-053-21	IC AN5265 IC CXA1211M	
				IC302	8-759-998-98		
D5 14 D5 15		DIODE ERC38-06 DIODE ERC38-06	9 9 8 9	IC303 IC304	8-759-932-67	IC CXA1214P IC BU4053BCF	
			•	IC305	8-759-631-08	IC M51279FP	



Les composants identifies par une trame et une marque \(\Lambda\) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION REMARK
IC306	8-759-711-32	IC NJM2245M		L314 L316		INDUCTOR CHIP 27UH INDUCTOR CHIP 27UH
IC309 IC310 IC311	8-759-932-67	IC NJM2245M IC BU4053BCF IC MC14066BF		L317 L319		INDUCTOR 18mH INDUCTOR 100UH
IC312 IC313	8-759-711-32	IC NJM2245M IC MM1113XFF		L320 L401	1-410-478-11	INDUCTOR 470UH INDUCTOR 47UH
IC314 IC315	8-759-932-67	IC MM1113XFF IC BU4053BCF		L402 L403 L404	1-410-216-31	INDUCTOR CHIP 100UH INDUCTOR CHIP 100UH INDUCTOR CHIP 100UH
IC316 IC317 IC318	8-759-009-51	IC MM1111XF IC MC14538BF IC MC14584BF		L405 L406		INDUCTOR 68UH INDUCTOR 68UH
IC320 IC321		IC MM1113XFF IC MM1113XFF		L407 L408 L409	1-408-413-00	INDUCTOR 22UH INDUCTOR 22UH INDUCTOR CHIP 68UH
IC322 IC323	8-759-287-89 8-759-287-89	IC MM1113XFF IC MM1113XFF		L500	1-459-155-00	COIL (WITH CORE) 45UH
IC324 IC325	8-759-287-89	IC MM1113XFF IC MM1113XFF		L501 L502 L503	1-407-365-00 1-410-093-11	COIL,CHOKE COIL,CHOKE INDUCTOR 33mH
IC326 IC327 IC350	8-759-008-67	IC BA10324AF IC MC14066BF IC uPC4558G2		L504 L505		INDUCTOR 18UH INDUCTOR 47UH
IC401	8-759-196-69	IC BA7655AF-E2		L506 L507	1-416-239-11 1-410-686-11	COIL, CHOKE 3.00mH (14M4U/E/A) INDUCTOR 1mH
IC402 IC403 IC404	8-759-008-67	IC CXA1211M IC MC14066BF IC CXA1739S		L508 L509		INDUCTOR 27UH COIL,DYNAMIC CONVERSION CHOKE
IC405 IC406	8-759-932-67 8-759-998-98	IC BU4053BCF IC LM358D		L511 L512 L513	Д 1-459-155-11	COIL(WITH CORE) COIL (WITH CORE) 45UH INDUCTOR 3.9mH
IC407 IC408	8-759-509-91	IC MC14066BF IC XRA10393F		L514 L515	1-459-104-00	COIL, DUST CORE COIL, DUST CORE
IC409 IC410 IC411	8-759-009-06	IC BA10324AF IC MC14052BF IC MC14024BF		L516 L517		COIL, HORIZONTAL LINEARITY INDUCTOR 680UH
IC412 IC413		IC BU4053BCF IC BU4053BCF		7 9 1 1 0		<neon lamp=""></neon>
IC500 IC502 IC503	8-759-009-51	IC H8D7248 IC MC14538BF IC MC14538BF		NL500	1-519-526-11	LAMP, NEON
IC504 IC505	8-752-053-21	IC CXA1211M IC XRA17812T				<transistor></transistor>
IC506 IC507	8-759-009-51 8-759-100-60	IC MC14538BF IC uPC1377C		Q101 Q102	8-729-216-22	TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SA1162-G
IC508 IC509	8-752-053-21 8-759-998-98	IC CXA1211M IC LM358D		Q103 Q104 Q105	8-729-907-26	TRANSISTOR 2SA1162-G TRANSISTOR IMX1 TRANSISTOR DTA144EKA-T146
IC510	8-759-009-51	IC MC14538BF		Q107	8-729-027-38	TRANSISTOR DTA144EKA-T146
		<chip conductor=""></chip>		Q108 Q109 Q110	8-729-422-29 8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S
JR302 JR307 JR310	1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP		Q111 Q112		TRANSISTOR DTA144EKA-T146 TRANSISTOR 2SD601A-S
,	1210 275 71			Q113 Q114	8-729-422-29 8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S
L101	1-408-609-41	<coil> INDUCTOR 33UH</coil>		Q200 Q201		TRANSISTOR 2SD774-34 TRANSISTOR 2SD601A-S
L102 L104 L105	1-408-425-00	INDUCTOR 47UH INDUCTOR 220UH INDUCTOR 100UH		Q300 Q301	8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SA1162-G
L300	1-410-478-11	INDUCTOR 47UH		Q302 Q303 Q305	8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S
L301 L302 L303	1-412-008-31	INDUCTOR 15UH INDUCTOR CHIP 15UH INDUCTOR 39UH		Q306 Q307		TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S
L304 L305	1-412-008-31	INDUCTOR CHIP 15UH INDUCTOR CHIP 2.2UH		Q308 Q309	8-729-422-29 8-729-422-37	TRANSISTOR 2SD601A-S TRANSISTOR 2SB709A-R
L306 L307	1-408-411-00	INDUCTOR 39UH INDUCTOR 15UH		Q310 Q311	8-729-422-37	TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R
L308 L309 L311	1-410-470-11	INDUCTOR 4.7UH INDUCTOR 10UH INDUCTOR 10UH		Q312 Q313 Q314	8-729-422-37	TRANSISTOR 2SD601A-S TRANSISTOR 2SB709A-R TRANSISTOR DTA144EKA-T146
L312		INDUCTOR CHIP 27UH		Q315		TRANSISTOR 2SB709A-R
				-		



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
Q316 Q318 Q319 Q320 Q321	8-729-422-37 8-729-422-29 8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S		Q420 Q421 Q422 Q423 Q424	8-729-027-59 8-729-120-28 8-729-422-29	TRANSISTOR 2SB709A-R TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146	
Q322 Q323 Q324 Q325 Q326	8-729-027-59 8-729-027-59 8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S		Q425 Q426 Q428 Q429 Q430	8-729-027-59 8-729-422-37 8-729-422-37	TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S	
Q327 Q328 Q329 Q330 Q331	8-729-141-53 8-729-141-53 8-729-422-37	TRANSISTOR 2SB709A-R TRANSISTOR 2SK94-X2X3X4 TRANSISTOR 2SK94-X2X3X4 TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R		Q431 Q432 Q433 Q434 Q435	8-729-422-29 8-729-027-59 8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146	
Q332 Q333 Q334 Q335 Q336	8-729-422-29 8-729-422-37 8-729-422-29	TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD601A-S TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S TRANSISTOR 2SK94-X4		Q436 Q437 Q438 Q439 Q440	8-729-027-59 8-729-422-29 8-729-216-22	TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD601A-S TRANSISTOR 2SA1162-G TRANSISTOR 2SD601A-S	
Q337 Q338 Q339 Q341 Q342	8-729-120-28 8-729-422-37 8-729-920-39	TRANSISTOR 2SD601A-S TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SB709A-R TRANSISTOR IMT1US TRANSISTOR IMT1US		Q441 Q442 Q443 Q444 Q445	8-729-422-29 8-729-216-22 8-729-422-29	TRANSISTOR 2SK94-X2X3X4 TRANSISTOR 2SD601A-S TRANSISTOR 2SA1162-G TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146	
Q343 Q345 Q346 Q347 Q348	8-729-422-29 8-729-422-29 8-729-027-59	TRANSISTOR IMT1US TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SB709A-R		Q446 Q447 Q448 Q449 Q500	8-729-027-59 8-729-027-59 8-729-027-59	TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SB709A-R	
Q349 Q350 Q351 Q352 Q353	8-729-422-37 8-729-422-29 8-729-422-29	TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S		Q501 Q502 Q505 Q506 Q507	8-729-119-80 8-729-422-29 8-729-422-29	TRANSISTOR 2SD1878-CA TRANSISTOR 2SC2688-LK TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S	
Q354 Q355 Q356 Q357 Q358	8-729-422-29 8-729-027-59 8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S		Q508 Q509 Q510 Q511 Q513	8-729-027-38 8-729-027-59 8-729-422-29	TRANSISTOR 2SB709A-R TRANSISTOR DTA144EKA-T146 TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD601A-S TRANSISTOR 2SA1220A-P	
Q359 Q360 Q361 Q362 Q363	8-729-907-26 8-729-027-38 8-729-422-29	TRANSISTOR 2SB709A-R TRANSISTOR IMX1 TRANSISTOR DTA144EKA-T146 TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S		Q514 Q515 Q516 Q517 Q518	8-729-106-92 8-729-027-59 8-729-027-38	TRANSISTOR DTC124EK TRANSISTOR 2SC2690A-Q TRANSISTOR DTC144EKA-T146 TRANSISTOR DTA144EKA-T146 TRANSISTOR DTC144EKA-T146	
Q364 Q366 Q367 Q368 Q369	8-729-422-37 8-729-422-37 8-729-422-37	TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R TRANSISTOR DTA144EKA-T146		Q519 Q520 Q522 Q523 Q524	8-729-021-82 8-729-422-29 8-729-422-29	TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD2396K TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S	
Q372 Q401 Q402 Q403 Q404	8-729-422-29 8-729-422-29 8-729-027-59	TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SB709A-R		Q525 Q526 Q527	8-729-020-07	TRANSISTOR 2SC4686A(LBSON	14M4U/E/A)
Q405 Q406	8-729-422-37 8-729-422-29	TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S		Q528 Q529	8-729-027-59	TRANSISTOR 2SA1407-D TRANSISTOR DTC144EKA-T146	Z-111-10/L/A)
Q407 Q408 Q409	8-729-422-37	TRANSISTOR 2SD601A-S TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R		Q530 Q531 Q532	8-729-216-22	TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SA1162-G (14M4U TRANSISTOR IRF520 (14M4U/E//	
Q410 Q411 Q412	8-729-422-29	TRANSISTOR IMX1 TRANSISTOR 2SD601A-S TRANSISTOR 2SA1162-G				<resistor></resistor>	
Q413 Q414	8-729-141-53	TRANSISTOR 25K94-X2X3X4 TRANSISTOR 2SB709A-R		R101 R102 R103	1-216-025-91	METAL GLAZE 100 5% METAL GLAZE 100 5% METAL GLAZE 100 5%	1/10W 1/10W 1/10W
Q415 Q416 Q417	8-729-422-37	TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R		R104 R105	1-216-073-00	METAL GLAZE 100 5% METAL GLAZE 10K 5% METAL GLAZE 2.7K 5%	1/10W 1/10W 1/10W
Q418 Q419	8-729-120-28	TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SB709A-R		R106 R107		METAL GLAZE 4.7K 5% METAL GLAZE 4.7K 5%	1/10W 1/10W



REF. NO.	PART NO.	DESCRIPTION]	REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK
R108 R109 R110	1-216-065-00	METAL GLAZE 4.7K METAL GLAZE 4.7K METAL GLAZE 10K	5% 5% 5%	1/10W 1/10W 1/10W	R315 R316 R317 R318	1-216-049-91 1-216-057-00	METAL GLAZE 120K METAL GLAZE 1K METAL GLAZE 2.2K METAL GLAZE 1K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R113 R117 R119 R124	1-216-073-00 1-216-073-00	METAL GLAZE 33K METAL GLAZE 10K METAL GLAZE 10K CONDUCTOR CHIR	5% 5% 5%	1/10W 1/10W 1/10W	R319 R320	1-216-067-00 1-216-057-00	METAL GLAZE 5.6K METAL GLAZE 2.2K	5% 5%	1/10W 1/10W
R130	1-216-099-00	CONDUCTOR, CHIP METAL GLAZE 120K	5%	1/10W	R321 R322 R323	1-216-035-00	METAL GLAZE 1.2K METAL GLAZE 270 METAL GLAZE 330K	5% 5% 5%	1/10W 1/10W 1/10W
R132 R133 R134 R135 R137	1-216-091-00 1-216-065-00 1-216-085-00	METAL GLAZE 4.7K METAL GLAZE 56K METAL GLAZE 4.7K METAL GLAZE 33K METAL GLAZE 4.7K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R324 R325 R326 R328	1-216-037-00 1-216-033-00	METAL GLAZE 150K METAL GLAZE 330 METAL GLAZE 220 METAL GLAZE 1M	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R140 R141	1-216-033-00	METAL GLAZE 220 METAL GLAZE 33K	5% 5%	1/10W 1/10W	R329 R330	1-216-055-00	METAL GLAZE 1.8K METAL GLAZE 47K	5% 5%	1/10W 1/10W
R144 R149 R151	1-216-295-91 1-216-065-00	CONDUCTOR, CHIP METAL GLAZE 4.7K METAL GLAZE 3.3K	5% 5%	1/10W 1/10W	R331 R332 R333 R334	1-216-093-00 1-216-097-91 1-216-097-91	METAL GLAZE 68K METAL GLAZE 100K METAL GLAZE 100K METAL GLAZE 68K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R154 R155 R157	1-216-083-00 1-216-065-00	METAL GLAZE 4.7K METAL GLAZE 27K METAL GLAZE 4.7K	5% 5% 5%	1/10W 1/10W 1/10W	R335 R336	1-216-083-00 1-216-065-00	METAL GLAZE 27K METAL GLAZE 4.7K	5% 5%	1/10W 1/10W
R158 R159	1-216-063-91	CONDUCTOR, CHIP METAL GLAZE 3.9K	5%	1/10W	R337 R338 R339	1-216-091-00	METAL GLAZE 10K METAL GLAZE 56K METAL GLAZE 8.2K	5% 5% 5%	1/10W 1/10W 1/10W
R160 R162 R163 R164 R165	1-216-065-00 1-216-065-00 1-216-067-00	METAL GLAZE 3.3K METAL GLAZE 4.7K METAL GLAZE 4.7K METAL GLAZE 5.6K CONDUCTOR, CHIP	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	R340 R341 R342 R343 R344	1-216-673-11 1-216-065-00 1-216-095-00	METAL GLAZE 47K METAL CHIP 8.2K METAL GLAZE 4.7K METAL GLAZE 82K	5% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W
R167 R168 R169 R171 R172	1-216-085-00 1-216-107-00 1-216-031-00	METAL GLAZE 3.3K METAL GLAZE 33K METAL GLAZE 270K METAL GLAZE 180 CONDUCTOR, CHIP	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	R345 R346 R347 R348	1-216-063-91 1-216-057-00 1-216-065-00	METAL GLAZE 120K METAL GLAZE 3.9K METAL GLAZE 2.2K METAL GLAZE 4.7K METAL GLAZE 180	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R177 R181 R184 R185 R187	1-216-065-00 1-216-649-11 1-216-073-00	METAL GLAZE 4.7K METAL GLAZE 4.7K METAL CHIP 820 METAL GLAZE 10K METAL GLAZE 3.3K	5% 5% 0.50% 5%	1/8W 1/10W 1/10W 1/10W 1/10W	R349 R350 R351 R352 R353	1-216-085-00 1-216-061-00 1-216-675-11	METAL CHIP 62K METAL GLAZE 33K METAL GLAZE 3.3K METAL CHIP 10K METAL GLAZE 1K	0.50% 5% 0.50% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R189 R190 R192 R195 R197	1-216-049-91 1-216-073-00 1-216-071-00	METAL GLAZE 10K METAL GLAZE 1K METAL GLAZE 10K METAL GLAZE 8.2K METAL GLAZE 3.3K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R354 R355 R356 R357 R358 R359	1-216-059-00 1-216-689-11 1-216-121-91 1-216-053-00	METAL GLAZE 1.2M METAL GLAZE 2.7K METAL GLAZE 39K METAL GLAZE 1M METAL GLAZE 1.5K METAL GLAZE 1.5K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R199 R200 R201 R202 R203	1-216-686-11		0.50% 5% 5% 5%	1/10W 1/10W 1/4W F 1/2W	R360 R361 R362 R363 R364	1-216-039-00 1-216-017-91 1-216-067-00 1-216-113-00	METAL GLAZE 4.7K METAL GLAZE 390 METAL GLAZE 47 METAL GLAZE 5.6K METAL GLAZE 470K METAL GLAZE 470K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R204 R205 R206 R207 R208	1-216-073-00 1-216-065-00	CARBON 4.7 METAL CHIP 680 METAL GLAZE 10K METAL GLAZE 4.7K METAL GLAZE 4.7K	5% 0.50% 5% 5% 5%	1/2W 1/10W 1/10W 1/10W 1/10W	R366 R367 R368 R371 R372	1-216-065-00 1-216-051-00 1-216-049-91 1-216-069-00	METAL GLAZE 4.7K METAL GLAZE 1.2K METAL GLAZE 1.8 METAL GLAZE 6.8K METAL GLAZE 1.5K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R209 R210 R211 R237 R301	1-216-061-00 1-249-393-11 1-216-089-91	METAL GLAZE 10K METAL GLAZE 3.3K CARBON 10 METAL GLAZE 47K METAL GLAZE 100	5% 5% 5% 5% 5%	1/10W 1/10W 1/4W F 1/10W 1/10W	R373	1-216-645-11 1-216-647-11 1-216-053-00 1-216-111-91	METAL CHIP 560 METAL CHIP 680 METAL GLAZE 1.5K METAL GLAZE 390K METAL GLAZE 510K	0.50% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R302 R303 R304 R305 R306	1-216-025-91 1-216-025-91 1-216-295-91	METAL GLAZE 100 METAL GLAZE 100 METAL GLAZE 100 CONDUCTOR, CHIP CONDUCTOR, CHIP	5% 5% 5%	1/10W 1/10W 1/10W	R379 R380 R381 R382 R383	1-216-069-00 1-216-065-00 1-216-689-11 1-216-101-00	METAL GLAZE 6.8K METAL GLAZE 4.7K METAL GLAZE 39K METAL GLAZE 150K METAL GLAZE 3,3K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R307 R308 R311 R312 R313	1-216-065-00 1-216-055-00 1-216-073-00	METAL GLAZE 560K METAL GLAZE 4.7K METAL GLAZE 1.8K METAL GLAZE 10K METAL CHIP 750	5% 5% 5% 5% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W	R384 R385 R386 R387	1-216-073-00 1-216-065-00 1-216-091-00 1-216-029-00	METAL GLAZE 10K METAL GLAZE 4.7K METAL GLAZE 56K METAL GLAZE 150	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R314	1-216-099-00	METAL GLAZE 120K	5%	1/10W	R388	1-210-039-00	METAL GLAZE 390	5%	1/10 W



REF. NO.	PART NO.	DESCRIPTION		R	EMARK	REF. NO.	PART NO.	DESCRIPTION		R	EMARK	
R389	1-216-649-11	METAL CHIP	820	0.50%	1/10W	R464	1-216-065-00	METAL GLAZE	4 7V	507.	1/1037	•
R390	1-249-393-11		10	5%	1/4W F	R465		METAL GLAZE		5% 5%	1/10W 1/10W	
R391		METAL GLAZE		5%	1/10W	R466		METAL GLAZE		5%	1/10W	
R393		METAL GLAZE		5%	1/10W					• , .	.,	
R394	1-216-083-00	METAL GLAZE	27K	5%	1/10W	R467		METAL GLAZE		5%	1/10W	
R395	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	R468		METAL GLAZE		5%	1/10W	
R396		METAL GLAZE		5%	1/10W	R469 R470		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	
R397		METAL GLAZE		5%	1/10W	R471		METAL GLAZE		5%	1/10W	
R398	1-216-105-91	METAL GLAZE	220K	5%	1/10W					0.0	272071	
R399	1-216-111-91	METAL GLAZE	390K	5%	1/10W	R472		METAL GLAZE		5%	1/10W	
R400	1 216 112 00	METAL GLAZE	4702	E Of	1/1000	R473		METAL GLAZE		5%	1/10W	
R401		METAL GLAZE		5% 5%	1/10W 1/10W	R474 R475		METAL CHIP METAL GLAZE	820	0.50%	1/10W	
R402		METAL GLAZE		5%	1/10W	R476		METAL GLAZE		5% 5%	1/10W 1/10W	
R403		METAL GLAZE		5%	1/10W		. 2.0 001 00	WILLIAM ODIADE	3.316	370	1/10**	
R404	1-216-029-00	METAL GLAZE	150	5%	1/10W	R477		METAL GLAZE		5%	1/10W	
TD 404	1 01 6 000 00	ACTAL CLASE	OFFIC		1 (1 0 1 1 1	R478		METAL GLAZE		5%	1/10W	
R406 R407		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R479		METAL GLAZE		5%	1/10W	
E401	1-210-077-00	METAL OLAZE	131		M2U/E/A)	R480 R481		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	
R407	1-216-085-00	METAL GLAZE	33K	5%	1/10W	1401	1-210-033-00	METAL GLAZE	220	370	1/10 W	
				(14	M4U/E/A)	R482	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R408		METAL CHIP	39K	0.50%	1/10W	R483		METAL GLAZE		5%	1/10W	
R410	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	R484		METAL CHIP	1K	0.50%	1/10W	
R411	1-216-033-00	METAL GLAZE	220	5%	1/10W	R485 R486		METAL GLAZE METAL CHIP		5%	1/10W	
R412		METAL GLAZE		5%	1/10W	K400	1-210-001-11	METAL CHIP	18K	0.50%	1/10W	
R413		METAL CHIP	5.1K		1/10W	R487	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W	
R414	1-216-662-11	METAL CHIP	3K	0.50%		R488	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
D 417	1 016 110 00	1/EE 41 CT 4 CE	40077		M2U/E/A)	R489		METAL GLAZE		5%	1/10W	
R416	1-216-113-00	METAL GLAZE	470K	5%	1/10W	R490		METAL GLAZE		5%	1/10W	
R417	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W	R491	1-210-001-00	METAL GLAZE	3.3K	5%	1/10W	
R418		METAL CHIP	4.7K	0.50%	1/10W	R492	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R419		METAL GLAZE		5%	1/10W	R493		CONDUCTOR, C	HIP			
R420		METAL GLAZE		5%	1/10W	R494		METAL CHIP	75K	0.50%	1/10W	
R422	1-210-073-00	METAL GLAZE	IUK	5%	1/10W	R495 R496		METAL CHIP	1K	0.50%	1/10W	
R423	1-216-073-00	METAL GLAZE	10K	5%	1/10W	K490	1-210-073-00	METAL GLAZE	IUK	5%	1/10W	
R424		METAL GLAZE		5%	1/10W	R497	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W	
R425		METAL GLAZE		5%	1/10W	R498		METAL GLAZE		5%	1/10W	
R426		METAL GLAZE		5%	1/10W	R499		METAL GLAZE		5%	1/10W	
R427	1-216-033-00	METAL GLAZE	220	5%	1/10W	R500		METAL GLAZE		5%	1/10W	
R428	1-216-097-91	METAL GLAZE	100K	5%	1/10W	R501	1-210-077-00	METAL GLAZE	15K	5%	1/10W	
R429		METAL GLAZE		5%	1/10W	R502	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	
R430	1-216-119-00	METAL GLAZE	820K	5%	1/10W	R503		METAL CHIP	12K	0.50%	1/10W	
R431		METAL GLAZE		5%	1/10W	R504		METAL GLAZE		5%	1/10W	
R432	1-216-089-91	METAL GLAZE	47K	5%	1/10W	R505		METAL GLAZE		5%	1/10W	
R434	1-216-109-00	METAL GLAZE	330K	5%	1/10W	R506	1-210-073-00	METAL GLAZE	IUK	5%	1/10W	
R435		METAL GLAZE		5%	1/10W	R507	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R436		METAL GLAZE		5%	1/10W	R508	1-216-105-91	METAL GLAZE	220K	5%	1/10W	
R437		METAL GLAZE		5%	1/10W	R509		METAL GLAZE		5%	1/10W	
R438	1-210-055-00	METAL GLAZE	1.5K	5%	1/10W	R510 R511		METAL GLAZE METAL GLAZE		5%	1/10W	
R439	1-216-033-00	METAL GLAZE	220	5%	1/10W	KJII	1-210-099-00	METAL GLAZE	12UK	5%	1/10W	
R440	1-216-049-91	METAL GLAZE	1K	5%	1/10W	R512	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R441		METAL CHIP	560	0.50%	1/10W	R513	1-216-295-91	CONDUCTOR, C	CHIP			
R442		METAL CHIP	680	0.50%	1/10W	R514		CONDUCTOR, C		0.50~	4 14 6	
R443	1-210-049-91	METAL GLAZE	112	5%	1/10W	R515 R516		METAL CHIP	10K	0.50%	1/10W	
R444	1-216-105-91	METAL GLAZE	220K	5%	1/10W	1.510	1-210-103-00	METAL GLAZE	TOOK	5%	1/10W	
R445		METAL GLAZE		5%	1/10W	R517	1-214-888-00	METAL	10K	1%	1/2W	
R447		METAL GLAZE		5%	1/10W	R518	1-260-123-11	CARBON	100K	5%	1/2W	
R448		METAL GLAZE		5%	1/10W	R519		METAL GLAZE		5%	1/10W	
R449	1-210-0/3-00	METAL GLAZE	IUK	5%	1/10W	R520 R521	1-249-423-11	CARBON METAL GLAZE	3.3K	5%	1/4W	F
R450	1-216-121-91	METAL GLAZE	1M	5%	1/10W	KJ21	1-210-003-00	MICIAL GLAZE	4./A.	5%	1/10W	
R451	1-216-037-00	METAL GLAZE	330	5%	1/10W	R523	1-215-892-11	METAL OXIDE	1K	5%	2W	F
R452		METAL CHIP	1K	0.50%	1/10W	R524	1-216-093-00	METAL GLAZE	68K	5%	1/10W	-
R453		METAL GLAZE		5%	1/10W	R525		METAL GLAZE		5%	1/10W	
R455	1-210-085-00	METAL GLAZE	33K	5%	1/10W	R526 R527		METAL GLAZE		5%	1/10W	
R456	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	RJ21	1-210-003-91	METAL GLAZE	4/K	5%	1/10W	
R457		METAL GLAZE		5%	1/10W	R528	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R458		METAL GLAZE		5%	1/10W	R529	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R459		METAL CHIP	820 Turb	0.50%	1/10W	R530		METAL OXIDE		5%		F
R460	1-210-293-91	CONDUCTOR, C	-mr			R531 R532		METAL GLAZE METAL OXIDE		5%	1/10W 3W	E
R462	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	11332	1-413-720-11	WILLIAL VAIDE	J.JR.	5%	J ##	F
R463		METAL GLAZE		5%	1/10W	R533	1-247-723-71	CARBON	6.8K	5%	1/4W	F
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REF. NO.	PART NO.	DESCRIPTION		1	REMARK	REF. NO.	PART NO.	DESCRIPTION		R	EMARK
R534		METAL GLAZE		5%	1/10W	R599	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R535 R536	1-249-448-11 1-216-101-00	CARBON METAL GLAZE	1.2 150K	5% 5%	1/4W F	R1103	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R537		METAL GLAZE		5%	1/10W	R1104	1-216-699-11	METAL CHIP	100K	0.50%	1/10W
R539	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	R1105 R1106		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R540 R541	1-216-113-00 1-249-383-11	METAL GLAZE	470K 1.5	5% 5%	1/10W 1/4W F	R1107	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R542		METAL GLAZE		5%	1/10W	R1108	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R543	1-212-883-00	FUSIBLE	120	5%	1/4W F	R1111 R1112		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R544		METAL GLAZE		5%	1/10W	R1113	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R545 R546	1-216-073-00	METAL GLAZE CARBON	10K 4.7K	5% 5%	1/10W 1/4W F	R1114	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R547		METAL GLAZE		5%	1/10W	R1115		METAL GLAZE		5%	1/10W
R548	1-210-057-00	METAL GLAZE	2.2K	5%	1/10W	R1116 R1117		METAL CHIP METAL GLAZE	12K 6.8K	0.50% 5%	1/10W 1/10W
R549 R550		METAL CHIP METAL GLAZE	12K	0.50% 5%	1/10W 1/10W	R1118 R1119		METAL GLAZE METAL CHIP	470K 62K	5% 0.50%	1/10W 1/10W
R551	1-216-077-00	METAL GLAZE	15K	5%	1/10W					0.50%	1/10W
R552 R553		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1120 R1123		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
						R1124	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R554 R555		METAL GLAZE METAL CHIP	51K	5% 0.50%	1/10W 1/10W	R1125 R1126		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R556 R558		METAL OXIDE METAL OXIDE		5% 5%	2W F	R1128	1_216_065_00	METAL GLAZE	4 7K	5%	1/10W
R559		METAL GLAZE		5%	1/10W	R1129	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
				(1-	4M2U/E/A)	R1130 R1131		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R559	1-216-109-00	METAL GLAZE	330K	5%	1/10W	R1132		METAL GLAZE		5%	1/10W
R560	1-216-091-00	METAL GLAZE	56K	5%	4M4U/E/A) 1/10W	R1133	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R561 R562	1-216-049-91 1-2 47-69 6-11	METAL GLAZE	1K 47	5% 5%	1/10W 1/4W F	R1134 R1136		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
				(1	4M4U/E/A)	R1137	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R563	1-216-017-91	METAL GLAZE	47	5%	1/10W	R1138	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R564		METAL GLAZE		5%	1/10W	R1139		METAL GLAZE		5%	1/10W
R565 R566		METAL GLAZE METAL CHIP	27K	5% 0.50%	1/10W 1/10W	R1140 R1141		METAL CHIP METAL GLAZE	1.2K 10K	0.50% 5%	1/10W 1/10W
R566	1.216.691.11	METAL CHIP	47K		4M2U/E/A) 1/10W	R1142 R1143		METAL CHIP METAL CHIP	1.2K 1.2K	0.50% 0.50%	1/10W 1/10W
				(1	4M4U/E/A)						
R567		METAL GLAZE		5%	1/10W	R1144 R1145		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R568 R569	1-216-073-00 1-260-114-11	METAL GLAZE	10K 18K	5% 5%	1/10W 1/2W	R1146 R1147		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R571	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	R1150		METAL GLAZE		5%	1/10W
R572 R573		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1151	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R574	1.216.080.01	METAL GLAZE	ATK	5%	1/10W	R1155 R1161		METAL GLAZE METAL CHIP	3.3M 1M	5% 0.50%	1/10W 1/10W
				(1	4M4U/E/A)	R1162	1-218-768-11	METAL CHIP	470K	0.50%	1/10W
R575 R576	1-249-383-11 1-216-101-00	CARBON METAL GLAZE	1.5 150K	5% 5%	1/4W F 1/10W	R1163	1-216-033-00	METAL GLAZE	220	5%	1/10W
R577		METAL GLAZE		5%	1/10W 4M4U/E/A)	R1164 R1165		METAL GLAZE		5%	1/10W
R578	1-216-693-11	METAL CHIP	56K	0.50%		R1167		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R580	1-216-105-01	METAL GLAZE	220K	5%	1/10W	R1168 R1169	1-216-097-91	METAL GLAZE METAL GLAZE	100K	5% 5%	1/10W 1/10W
R581		METAL GLAZE		5%	1/10W						
R582	1-216-085-00	METAL GLAZE	33K	5%	4M4U/E/A) 1/10W	R1170 R1171		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R583 R584		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1172 R1173	1-216-085-00	METAL GLAZE	33K	5%	1/10W
						R1174		CONDUCTOR, C METAL GLAZE		5%	1/10W
R585 R586		METAL GLAZE METAL CHIP	220 30K	5% 0.50%	1/10W 1/10W	R1177	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R587 R588	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	R1179	1-216-041-00	METAL GLAZE	470	5%	1/10W
R588 R589		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1180 R1182	1-216-131-11	METAL GLAZE METAL GLAZE	2.7M	5% 5%	1/10W 1/10W
R590	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R1183		METAL GLAZE		5%	1/10W
R591	1-216-683-11	METAL CHIP	22K	0.50%	1/10W	R1184		METAL GLAZE		5%	1/10W
R592 R593	1-247-688-11 1-216-647-11	CARBON METAL CHIP	10 680	5% 0.50%	1/4W F 1 1/10W	R1185 R1186		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R594	1-260-104-91		2.7K	5%	1/2W	R1187 R1188	1-216-071-00	METAL GLAZE METAL GLAZE	8.2K	5%	1/10W 1/10W
R595		METAL GLAZE		5%	1/10W					5%	
R596 R597	1-214-754-00 1-249-417-11	CARBON	11K 1K	1% 5%	1/4W 1/4W F	R1189 R1190		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R598	1-216-085-00	METAL GLAZE	33K	5%	1/10W	R1191		METAL GLAZE		5%	1/10W



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REF. NO.	PART NO.	DESCRIPTION		R	EMARK	REF. NO.	PART NO.	DESCRIPTION		1	REMARK
R1192 R1193		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1365 R1366 R1367	1-216-081-00	METAL GLAZE METAL GLAZE METAL CHIP		5% 5% 0.50%	1/10W 1/10W 1/10W
R1194 R1195 R1196 R1197 R1198	1-216-025-91 1-216-085-00 1-216-025-91	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	100 33K 100	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1368 R1369 R1370 R1371 R1372	1-216-051-00 1-216-105-91 1-216-113-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	1.2K 220K 470K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R1301 R1302 R1303 R1304 R1305	1-216-029-00 1-216-039-00 1-216-689-11	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	150 390 39K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1373 R1374 R1375 R1376 R1377	1-216-063-91 1-216-101-00 1-216-645-11 1-216-647-11	METAL GLAZE METAL GLAZE METAL CHIP METAL CHIP METAL GLAZE	3.9K 150K 560 680	5% 5% 0.50% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W
R1306 R1307 R1308 R1309 R1311	1-216-091-00 1-216-645-11 1-216-025-91	METAL CHIP METAL GLAZE METAL CHIP METAL GLAZE METAL GLAZE	56K 560 100	0.50% 5% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1378 R1379 R1380 R1381 R1382	1-216-065-00 1-216-037-00 1-216-645-11 1-216-647-11	METAL GLAZE METAL GLAZE METAL CHIP METAL CHIP METAL GLAZE	4.7K 330 560 680	5% 5% 5.50% 0.50%	1/10W 1/10W 1/10W 1/10W
R1312 R1313 R1314 R1315 R1316	1-216-097-91 1-216-081-00 1-216-025-91 1-216-065-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	100K 22K 100 4.7K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1383 R1384 R1385 R1386 R1387	1-216-681-11 1-216-091-00 1-216-073-00 1-216-077-00	METAL CHIP METAL GLAZE METAL GLAZE METAL GLAZE METAL CHIP	18K 56K 10K	5% 0.50% 5% 5% 5% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W 1/10W
R1317 R1318 R1319 R1320 R1321	1-216-089-91 1-216-085-00 1-216-057-00 1-216-649-11	METAL GLAZE METAL GLAZE METAL GLAZE METAL CHIP	47K 33K 2.2K 820	5% 5% 5% 5% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W	R1388 R1389 R1390 R1391 R1392	1-216-658-11 1-216-647-11 1-216-025-91	METAL CHIP METAL CHIP METAL CHIP METAL GLAZE METAL GLAZE		0.50% 0.50% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R1322 R1324 R1325 R1326 R1327	1-216-061-00 1-216-652-11 1-216-073-00	METAL GLAZE METAL GLAZE METAL CHIP METAL GLAZE METAL GLAZE	3.3K 1.1K 10K	5% 5% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1393 R1394 R1395 R1396 R1397	1-216-041-00 1-216-071-00 1-216-071-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	470 8.2K 8.2K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R1328 R1329 R1330 R1331 R1332	1-216-103-00 1-216-081-00 1-216-679-11	METAL GLAZE METAL GLAZE METAL CHIP METAL CHIP	180K 22K 15K	5% 5% 5% 0.50% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W	R1399 R1401 R1402 R1403	1-216-073-00 1-216-085-00 1-216-295-91	METAL GLAZE METAL GLAZE CONDUCTOR, C METAL CHIP	10K 33K	5% 5% 0.50%	1/10W 1/10W
R1333 R1334 R1335 R1336 R1337	1-216-063-91 1-249-401-11 1-216-095-00	METAL GLAZE METAL GLAZE CARBON METAL GLAZE METAL GLAZE	3.9K 47 82K	5% 5% 5% 5% 5%	1/10W 1/10W 1/4W F 1/10W 1/10W	R1404 R1405 R1406 R1407 R1408	1-216-681-11 1-216-071-00 1-216-653-11 1-216-061-00 1-216-113-00	METAL CHIP METAL GLAZE METAL CHIP METAL GLAZE METAL GLAZE	18K 8.2K 1.2K 3.3K 470K	0.50% 5% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R1338 R1339 R1340 R1341 R1342	1-216-033-00 1-216-033-00 1-216-033-00	METAL CHIP METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	220 220 220	5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1409 R1410 R1411 R1412 R1413 R1414	1-216-053-00 1-216-073-00 1-216-107-00 1-216-081-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	1.5K 10K 270K 22K	5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R1343 R1344 R1345 R1346 R1347	1-216-093-00 1-216-109-00 1-216-097-91	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	68K 330K 100K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1415 R1416 R1417 R1418 R1419	1-216-093-00 1-216-113-00 1-216-033-00 1-216-033-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	68K 470K 220 220	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W 1/10W
R1348 R1349 R1350 R1351 R1352	1-216-035-00 1-216-073-00 1-216-033-00 1-216-065-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	270 10K 220 4.7K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1420 R1421 R1422 R1423 R1424	1-216-089-91 1-216-649-11 1-216-085-00 1-216-057-00	METAL GLAZE METAL CHIP METAL GLAZE METAL GLAZE METAL GLAZE	47K 820 33K 2.2K	5% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R1353 R1354 R1355 R1356 R1357	1-216-089-91 1-216-033-00 1-216-105-91 1-216-101-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	47K 220 220K 150K	5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1425 R1426 R1427 R1428 R1429	1-216-013-00 1-216-113-00 1-216-681-11 1-216-061-00	METAL GLAZE METAL GLAZE METAL CHIP METAL GLAZE METAL CHIP	33 470K 18K 3.3K	5% 5% 0.50% 5% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W
R1358 R1359 R1360 R1361 R1362	1-216-099-00 1-216-065-00 1-216-113-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL CHIP	120K 4.7K 470K	5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1430 R1431 R1432 R1433 R1434	1-216-073-00 1-216-129-00 1-216-089-91 1-216-085-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	10K 2.2M 47K 33K	5% 5% 5% 5% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W
R1363 R1364		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1435		METAL GLAZE		5%	1/10W



Les composants identifies par une trame et une marque Λ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark Δ are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION		1	REMARK	REF. NO.	PART NO.	DESCRIPTION		F	REMARK
R1436	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R1508	1-216-083-00	METAL GLAZE	278	5%	1/10W
R1437		METAL GLAZE		5%	1/10W	R1509		METAL GLAZE		5%	1/10W
R1438		METAL GLAZE		5%	1/10W	R1510		METAL GLAZE		5%	1/10W
R1439	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	R1511		METAL OXIDE		5%	1W F
						R1512	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R1440		METAL GLAZE		5%	1/10W	D. 4.4.4					
R1441 R1442		METAL GLAZE		5%	1/10W	R1513	1-247-752-11		1K	5%	1/2W F
R1442		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1514 R1515	1-247-711-11		680	5%	1/4W F
R1444		METAL GLAZE		5%	1/10W	R1515		METAL OXIDE METAL GLAZE		5% 5% .	1W F 1/10W
				010	272011	R1517		METAL GLAZE		5%	1/10W
R1445		METAL GLAZE		5%	1/10W				******		1/10//
R1446		METAL GLAZE		5%	1/10W	R1518		METAL OXIDE		5%	1W F
R1447 R1448		METAL GLAZE		5%	1/10W	R1519		METAL OXIDE		5%	1W F
R1449		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1520 R1521		METAL GLAZE METAL GLAZE		5%	1/10W
201775	1 210 057 00	مناسات دارا الساد	4.4.4	370	17.10 11	R1523		METAL OCIDE		5% 5%	1/10W 1W F
R1450	1-216-129-00	METAL GLAZE	2.2M	5%	1/10W	***************************************	1 210 330 11	DITTE ONIDE	1,2	5 70	144 1
R1451		METAL GLAZE		5%	1/10W	R1524	1-216-427-00	METAL OXIDE	120	5%	1W F
R1452		METAL GLAZE		5%	1/10W	R1525		METAL GLAZE		5%	1/10W
R1453 R1454		METAL GLAZE		5%	1/10W	R1526		METAL GLAZE		5%	1/10W
K1434	1-210-003-00	METAL GLAZE	4./K	5%	1/10W	R1527 R1528	1-249-413-11	METAL OXIDE	470	5%	1/4W F
R1455	1-216-113-00	METAL GLAZE	470K	5%	1/10W	1(1320	1-213-009-11	METAL OAIDE	110	5%	1W F
R1456		METAL GLAZE		5%	1/10W	R1529	1-202-829-11	SOLID	8.2K	20%	1/2W
R1457		METAL GLAZE		5%	1/10W	R1530		METAL GLAZE		5%	1/10W
R1458		METAL GLAZE		5%	1/10W	R1531	1-247-697-11		56	5%	1/4W F
R1459	1-210-133-00	METAL GLAZE	3.3M	5%	1/10W	R1532		METAL GLAZE		5%	1/10W
R1460	1.216-007-01	METAL GLAZE	100K	5%	1/10W	R1533	1-249-414-11	CARBON	560	5%	1/4W F
R1461		METAL CHIP	560	0.50%	1/10W	R1534	1-216-650-11	METAL CHIP	2.2K	0.50%	1/10W
R1462		METAL CHIP	560	0.50%		HR1536		METAL CHIP	Z.ZR	0.30 %	1/10W
R1463		METAL CHIP	560	0.50%	1/10W	R1537	1-249-389-11		4.7	5%	1/4W F
R1464	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	R1538		METAL GLAZE		5%	1/10W
R1465	1-216-007-01	METAL GLAZE	1001	5%	1/103/	R1539	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1466		METAL GLAZE		5%	1/10W 1/10W					(14	IM4U/E/A)
R1467		METAL GLAZE		5%	1/10W	R1540	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R1468		METAL GLAZE		5%	1/10W	R1541		METAL GLAZE		5%	1/10W
R1469	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	R1542	1-247-692-71		22	5%	1/4W F
D1470	1 216 057 00	METAL OLATE	0.01/	F.01	1/1011	D1540	1 01 (000 00				M4U/E/A)
R1470 R1471		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1543		METAL GLAZE		5%	1/10W
R1472		METAL GLAZE		5%	1/10W	R1547	1-210-393-00	METAL OXIDE	2.2	5%	3W F
R1473		METAL GLAZE		5%	1/10W	R1548	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1475	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	R1549	1-260-094-11		390	5%	1/2W
D1484						R1550		METAL GLAZE	220K	5%	1/10W
R1476 R1477		METAL GLAZE METAL GLAZE		5% 5%	1/10W	R1551	1-249-393-11		10	5%	1/4W F
R1478		METAL GLAZE		5%	1/10W 1/10W	R1552	1-210-091-00	METAL GLAZE	56K	5%	1/10W
R1480		METAL GLAZE		5%	1/10W	R1553	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R1481	1-216-115-00	METAL GLAZE	560K	5%	1/10W	R1554		METAL GLAZE		5%	1/10W
D1400						R1555	1-216-295-91	CONDUCTOR, C	CHIP		
R1482 R1483		METAL GLAZE		5%	1/10W	R1556	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R1484		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1557	1-218-760-11	METAL CHIP	220K	0.50%	1/10W
R1485		METAL GLAZE		5%	1/10W	R1558	1-249-393-11	CARRON	10	5%	1/4W F
R1486		METAL GLAZE		5%	1/10W	R1559	1-249-393-11		10	5%	1/4W F
21102						R1560		METAL GLAZE	1K	5%	1/10W
R1487 R1488		METAL GLAZE		5%	1/10W	R1567	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1489		METAL GLAZE METAL GLAZE		5%	1/10W	R1568	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1490		METAL GLAZE		5% 5%	1/10W 1/10W	R1569	1-216-073-00	METAL GLAZE	10K	5%	1/1002
R1491		METAL GLAZE		5%	1/10W	R1570		METAL GLAZE		5% 5%	1/10W 1/10W
						R1571		METAL GLAZE		5%	1/10W
R1492		METAL GLAZE		5%	1/10W	R1572		METAL GLAZE		5%	1/10W
R1493 R1494		METAL GLAZE		5%	1/10W	R1573	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1494		METAL GLAZE METAL GLAZE		5% 5%	1/10W	D1574	1 216 041 00	METAL OLAGE	450		4.14.0374
R1496		METAL GLAZE		5% 5%	1/10W 1/10W	R1574 R1575		METAL GLAZE METAL GLAZE		5%	1/10W
				2 /0	.,	R1576		METAL GLAZE		5% 5%	1/10W 1/10W
R1498		METAL GLAZE		5%	1/10W	R1577	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1499		METAL GLAZE		5%	1/10W	R1578		METAL GLAZE		5%	1/10W
R1500		METAL CHIP	680	0.50%	1/10W	D1570	1.014.400.41				
R1501 R1502	1-216-075-00	METAL GLAZE	12K 3.3K	5% 5%	1/10W 1/2W	R1579 R1580	1-216-689-11	METAL CHIP	39K		1/10W
	1 400 10J-11	J. 1110/11	J.J.N.	5 70	A12 W	NIJOU	1-210-009-91	METAL GLAZE	4/1	5%	1/10W
R1503	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W	R1581	1-208-612-11	METAL OXIDE	10M	5%	M4U/E/A) 1W
R1504		METAL CHIP	30K	0.50%	1/10W						M4U/E/A)
R1505 R1506	1-247-688-11		10	5%	1/4W F	R1582	1-208-610-11	METAL OXIDE	2M	5%	1W
R1500		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1583	1_212_009 60	Citable	470		M4U/E/A)
	A-840 005-00	CUMBE	-V+ F A%	3 10	1/1044	W1703	1-212-998-00	FUSIBLE	470	5%	1/2W F
										(14	M4U/E/A)



REF. NO.	PART NO.	DESCRIPTION		1	REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
R1589 R1595		METAL OXIDE METAL GLAZE		5% 5%	3W F 1/10W	R2367	1-216-099-00	METAL GLAZE	120K	5%	1/10W
R1596	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R2368	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1597		METAL GLAZE		5%	1/10W	R2369		METAL CHIP		0.50%	1/10W
R1598	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	R2371		METAL GLAZE		5%	1/10W
R1599	1-202-830-00	COL ID	10K	20%	1000	R2372		METAL GLAZE		5%	1/10W
K1399	1-202-630-00	SOLID	IUK		1/2W 4M4U/E/A)	R2374	1-210-097-91	METAL GLAZE	100K	5%	1/10W
R2300	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	R2375	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2301		METAL GLAZE		5%	1/10W	R2376		METAL GLAZE		5%	1/10W
R2302		METAL CHIP	6.8K	0.50%	1/10W	R2377	1-216-033-00	METAL GLAZE	220	5%	1/10W
R2303	1-216-093-00	METAL GLAZE	68K	5%	1/10W	R2378		METAL GLAZE		5%	1/10W
R2304	1 216 105 01	METAL GLAZE	22012	5%	1/1007	R2379	1-216-033-00	METAL GLAZE	220	5%	1/10W
R2305		METAL GLAZE		5%	1/10W 1/10W	R2380	1-216-080-01	METAL GLAZE	ATV	5%	1/1037
R2306		METAL GLAZE		5%	1/10W	R2381		METAL GLAZE		5%	1/10W 1/10W
R2307		METAL GLAZE		5%	1/10W	R2382		METAL GLAZE		5%	1/10W
R2308	1-216-103-00	METAL GLAZE	180K	5%	1/10W	R2383		METAL GLAZE	220	5%	1/10W
R2309	1 016 040 01	METAL CLASS	127	E 01		R2384	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R2310		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R2385	1 216 072 00	METAL GLAZE	101/2	e or	1 /1 0337
R2311		METAL GLAZE		5%	1/10W	R2386		METAL GLAZE		5% 5%	1/10W 1/10W
R2312		METAL GLAZE		5%	1/10W	R2387		METAL GLAZE		5 <i>%</i>	1/10W
R2313	1-216-049-91	METAL GLAZE	1K	5%	1/10W	R2388		METAL GLAZE		5%	1/10W
D 2214	1 216 646 11	METAL CHID	660	0.500	1/100	R2389	1-216-033-00	METAL GLAZE	220	5%	1/10W
R2314 R2315		METAL CHIP METAL CHIP	560 15K	0.50%	1/10W 1/10W	R2390	1.016.647.11	METAL CHIP	400	0.500	1/1007
R2316		METAL GLAZE		5%	1/10W	R2391		METAL CHIP		0.50% 0.50%	1/10W 1/10W
R2317		METAL GLAZE		5%	1/10W	R2392		METAL GLAZE		5%	1/10W
R2318	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	R2393		METAL GLAZE		5%	1/10W
R2319	1 214 002 00	MCTAL CLAZE	60W	F.01	* /1011	R2394	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R2320		METAL GLAZE METAL CHIP	12K	5% 0.50%	1/10W 1/10W	R2396	1-216-041-00	METAL GLAZE	470	E CII.	1/1007
R2321		METAL GLAZE		5%	1/10W	R2397		METAL GLAZE		5% 5%	1/10W 1/10W
R2322		METAL GLAZE		5%	1/10W	R2398		METAL GLAZE		5%	1/10W
R2323	1-216-683-11	METAL CHIP	22K	0.50%	1/10W	R2399	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2324	1-216-073-00	METAL GLAZE	1010	5%	1/10W	R2501	1-216-083-00	METAL GLAZE	27K	5%	1/1 0W
R2325		METAL GLAZE		5%	1/10W	R2502	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R2326		METAL GLAZE		5%	1/10W	R2503		METAL GLAZE		5%	1/10W
R2327		METAL GLAZE		5%	1/10W	R2504	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R2328	1-216-049-91	METAL GLAZE	IK	5%	1/10W	R2504	1 216 101 00	METAL CLAZE	1507		4M2U/E/A)
R2329	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	R2304	1-210-101-00	METAL GLAZE	130K	5% (1	1/10W 4M4U/E/A)
R2330		METAL GLAZE		5%	1/10W	R2551	1-216-091-00	METAL GLAZE	56K :	5% `^	1/10W
R2331		METAL GLAZE		5%	1/10W						
R2332 R2333		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R2552		METAL GLAZE		5%	1/10W
142555	1-210-007-71	METAL GUALE	7/10	3 70	1/10W	R2553 R2555		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R2334	1-216-041-00	METAL GLAZE	470	5%	1/10W	R2556		METAL GLAZE		5%	1/10W
R2335		METAL GLAZE		5%	1/10W	R2557	1-216-067-00	METAL GLAZE		5%	1/10W
R2336 R2337		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	Dasso	1 216 057 00	METAL OLAZE	0.077	- 01	1/1001
R2338	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R2558 R2559	4 44 4 444 44	METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	R2560		METAL GLAZE		5%	1/10W
R2339		METAL GLAZE		5%	1/10W	R2561		METAL GLAZE		5%	1/10W
R2340 R2341		METAL GLAZE METAL GLAZE		5%	1/10W	R2562	1-216-001-00	METAL GLAZE	10	5%	1/10W
R2342		METAL GLAZE		5% 5%	1/10W 1/10W	R2563	1-240-421-11	CARRON	225	e 01.	1 /4337
R2343		METAL GLAZE		5%	1/10W	R3301	1-249-421-11 1-216-073-00	METAL GLAZE		5% 5%	1/4W 1/10W
						R3302		METAL GLAZE		5%	1/10W
R2344		METAL GLAZE		5%	1/10W	R3303		METAL GLAZE		5%	1/10W
R2345 R2346		METAL CHIP METAL GLAZE	18K	0.50% 5%	1/10W 1/10W	R3304	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R2347		METAL GLAZE		5%	1/10W	R3305	1-216-061-00	METAL GLAZE	3 3 K	5%	1/10W
R2348		METAL GLAZE		5%	1/10W	R3306		METAL GLAZE		5%	1/10W
D 00.40		METAL CITY				R3308		METAL GLAZE	100K	5%	1/10W
R2349		METAL CHIP	15K	0.50%	1/10W	R3309		METAL GLAZE		5%	1/10W
R2350 R2351		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R3310	1-210-049-91	METAL GLAZE	IK S	5%	1/10W
R2352		METAL GLAZE		5%	1/10W	R3311	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R2353		METAL GLAZE		5%	1/10W	R3312	1-216-105-91	METAL GLAZE	220K	5%	1/10W
D 215#	1.016.005.01	METAL CLASS	100	5 <i>01</i>	1/1/00	R3317	1-216-675-11	METAL CHIP	10K (0.50%	1/10W
R2354 R2357		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R3320		METAL GLAZE		5%	1/10W
R2358		METAL GLAZE		5%	1/10W	R3323	1-210-089-91	METAL GLAZE	4/K	5%	1/10W
R2361	1-216-099-00	METAL GLAZE	120K	5%	1/10W	R3333	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R2362	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R3334	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2363	1-216-065-00	METAL GLAZE	ATE	5%	1/10W	R3335		METAL GLAZE		5%	1/10W
R2364		METAL GLAZE		5%	1/10W	R3337 R3338		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R2365	1-216-687-11	METAL CHIP	33K	0.50%	1/10W			OLALE	100M	טא כ	1110W
R2366	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W ¹	R3339	1-216-093-00	METAL GLAZE	68K 5	5%	1/10W



Les composants identifies par une trame et une marque \(\Delta\) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ∆ are critical for safety.
Replace only with part number specified.

ا لنگ							numero specifie.	specified.	ing with p	art Hulliger
REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
R3340 R3344 R3345 R3346	1-216-081-00 1-216-033-00 1-216-025-91	METAL GLAZE 120K METAL GLAZE 22K METAL GLAZE 220 METAL GLAZE 100 METAL GLAZE 100	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	TP300 TP301 TP305 TP306	* 1-535-877-22 * 1-535-877-22	<test pin=""> CHIP, CHECKE CHIP, CHECKE CHIP, CHECKE CHIP, CHECKE</test>	R R		
R3348 R3349 R3350 R3351	1-216-025-91 1-216-025-91 1-216-113-00	METAL GLAZE 100 METAL GLAZE 100 METAL GLAZE 470K METAL GLAZE 820K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	TP307 TP307 TP311 TP312 TP401	*1-535-877-22 *1-535-877-22 *1-535-877-22	CHIP, CHECKE CHIP, CHECKE CHIP, CHECKE CHIP, CHECKE CHIP, CHECKE	R R R		
R3355 R3356 R3357 R3358 R3359	1-216-051-00 1-216-051-00 1-216-051-00	METAL GLAZE 47K METAL GLAZE 1.2K METAL GLAZE 1.2K METAL GLAZE 1.2K METAL GLAZE 22K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	TP402 TP403 TP501 TP502	*1-535-877-22 *1-535-877-22 *1-535-877-22	CHIP, CHECKE CHIP, CHECKE CHIP, CHECKE CHIP, CHECKE	R R R		
R3360 R3361 R3362 R3363	1-216-089-91 1-216-049-91 1-216-049-91	METAL GLAZE 10K METAL GLAZE 47K METAL GLAZE 1K METAL GLAZE 1K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	TP503 TP504	*1-535-877-22	CHIP, CHECKE CHIP, CHECKE <crystal></crystal>	R		
R3364 R3376 R3377 R3378 R3381 R3382	1-216-081-00 1-216-107-00 1-216-115-00 1-216-041-00	METAL GLAZE 10K METAL GLAZE 22K METAL GLAZE 270K METAL GLAZE 560K METAL GLAZE 470 METAL CHIP 560	5% 5% 5% 5% 5% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W 1/10W	X101 X300 X300 X301 X301	1-577-259-11 3-741-396-01 1-527-722-00	VIBRATOR, CE VIBRATOR, CR INSULATOR VIBRATOR, CR INSULATOR	YSTAL		
R3383 R3384 R3385 R3386 R3390	1-216-063-91 1-216-057-00 1-216-057-00	METAL GLAZE 6.8K METAL GLAZE 3.9K METAL GLAZE 2.2K METAL GLAZE 2.2K METAL GLAZE 2.2K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	*****		**************************************	OMPLETE	nde nde nde nde nde nde de	aje nje nje nje nje aje aje aje
R3394 R3395 R3396 R3398 R4401	1-216-049-91 1-216-041-00 1-216-685-11	METAL GLAZE 47K METAL GLAZE 1K METAL GLAZE 470 METAL CHIP 27K METAL GLAZE 33K	5% 5% 5% 0.50% 5%	1/10W 1/10W 1/10W 1/10W 1/10W		*4-374-846-11 4-382-854-11	HOLDER, FUSE COVER, CAPA(SCREW (M3X1) RUBBER, SILIC	CITOR, CAI D), P, SW (+))
R4402 R4404 R4405 R4407 R4408	1-216-073-00 1-216-067-00 1-216-061-00	METAL GLAZE 470K METAL GLAZE 10K METAL GLAZE 5.6K METAL GLAZE 3.3K METAL GLAZE 2.7K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	C602 C603 C604	1-130-711-00 1-130-711-00 1-113-924-11	FILM CERAMIC	0.22MF 0.22MF 0.0047MF		250V 250V 250V
R4409 R4410 R4411 R4412 R4413	1-216-059-00 1-216-113-00 1-216-113-00	METAL GLAZE 2.7K METAL GLAZE 2.7K METAL GLAZE 470K METAL GLAZE 470K CONDUCTOR, CHIP	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	C605 C606 C607 C608 C609	1-113-924-11 1-113-924-11 1-113-924-11 1-113-924-11 1-113-924-11	CERAMIC CERAMIC CERAMIC CERAMIC	0.0047MF 0.0047MF 0.0047MF 0.0047MF 0.0047MF	20% 20% 20%	250V 250V 250V 250V 250V
R4414 R4415 R4416	1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP			C610 C611 C612	1-113-924-11 1-113-924-11 1-137-484-11	CERAMIC	0.0047MF 0.0047MF	20% 20%	250V 250V
RV501		<pre><variable resistor=""> RES, ADJ, WIREWOUND 1</variable></pre>	20		C613 C614 C615 C616	1-137-484-11 1-129-718-00 1-136-619-11 1-107-909-11	FILM FILM FILM	0.47MF 0.47MF 0.022MF 0.0016MF 47MF	10% 10% 10% 3% 20%	630V 630V 630V 2KV 35V
T300 T500	1-406-781-11 1-426-668-11	<transformer> COIL TRANSFORMER, FERRITE</transformer>	E (HDT)		C617 C618 C619 C621 C622	1-107-430-91 1-107-906-11 1-107-911-11 1-117-791-11 1-102-038-00	ELECT ELECT ELECT	0.0033MF 10MF 220MF 1000MF 0.001MF	10% 20% 20% 20%	1KV 50V 50V 160V 500V
T501 d	≤ 1-453-233-11 ≤ 1-453-232-11	TRANSFORMER ASSY, FL TRANSFORMER ASSY, FL RING, SHORT	YBACK (1 YBACK	(4M4U/E/A)	C623 C624 C625 C626 C627	1-107-900-51 1-102-038-00 1-107-900-51 1-102-038-00 1-107-900-51	CERAMIC ELECT CERAMIC	4700MF 0.001MF 4700MF 0.001MF 4700MF	20% 20% 20%	35V 500V 35V 500V 35V
T501 T502		SCREW +BVTP 4X16 TYPE TRANSFORMER, FERRITE	(DFT)	4M4U/E/A)	C628 C629 C630 C631 C632	1-102-038-00 1-107-891-11 1-126-964-11 1-136-853-11 1-107-492-11	ELECT ELECT FILM	0.001MF 3300MF 10MF 0.56MF 47MF	20% 20% 5% 20%	500V 25V 50V 200V 160V
TH500	1-807-970-11	<thermistor> THERMISTOR</thermistor>			C633 C634 C636 C637	1-107-885-11 1-107-911-11 1-107-909-11 1-107-910-11	ELECT ELECT	3300MF 220MF 47MF 100MF	20% 20% 20% 20%	16V 50V 50V 50V



REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK	ζ
C638	1-137-484-11	FILM	0.47MF	10%	630V	Q603	8-729-303-61	TRANSISTOR 2	SC3851-G	,		•
C2601	1-102-038-00	CERAMIC	0.001MF		500V			DECICEOD.				
		<connector></connector>				R601	1-202-719-00	<resistor></resistor>	1M	20%	1/2W	
CN601 CN602		PIN, CONNECTOR PIN, CONNECTOR	OR (PC BO			R602 R603 R604	1-216-491-11 1-216-490-11 1-249-418-11	METAL OXIDE METAL OXIDE CARBON	56K	5% 5% 5%	3W 3W 1/4W	
CN603 CN605 CN606	*1-573-964-11	PIN, CONNECTO PIN, CONNECTO PLUG, CONNEC	OR (PC BO			R605		WIREWOUND	0.15	5% 10%	1/4W 3W 1/4W	
CN607 CN609		PLUG, CONNECTO		ITCH)	2P	R607 R608 R609 R610	1-249-426-11 1-249-428-11 1-249-428-11 1-249-428-11	CARBON CARBON	5.6K 8.2K 8.2K 8.2K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
		<diode></diode>				R611	1-249-417-11		1K	5%	1/4W	F
D601 D605 D606 D607	8-719-979-85 8-719-988-55	DIODE D4SB60I DIODE EGP20G DIODE RGP15K DIODE RU-3AM	-6179			R612 R613 R614 R615	1-249-404-00 1-249-419-11 1-249-385-11 1-202-727-00	CARBON CARBON	82 1.5K 2.2 4.7M	5% 5% 5% 10%	1/4W 1/4W 1/4W 1/2W	F
D608 D609	8-719-911-19 8-719-300-33	DIODE 1SS119-2 DIODE RU-3AM	25			R617 R618 R619	1-202-933-61 1-202-933-61 1-202-933-61	FUSIBLE FUSIBLE	0.1 0.1 0.1	10% 10% 10%	1/2W 1/2W 1/2W	F
D610 D612 D613 D614	8-719-045-48 8-719-979-85	DIODE D5L60 DIODE FML-G1: DIODE EGP20G DIODE FML-G1:				R620 R621 R622	1-202-933-61 1-215-877-11 1-249-401-11	METAL OXIDE	0.1 22K 47	10% 5% 5%	1/2W 1W 1/4W	F
D615		DIODE EGP20G	23			R623 R626	1-249-417-11 1-247-895-91	CARBON	1K 470K	5% 5%	1/4W 1/4W	Г
D616 D617	8-719-054-32	DIODE ERA15-0 DIODE RD16ES				R627 R628	1-216-490-11	METAL OXIDE METAL OXIDE	39K	5% 5%	3W 3W	
D618	8-719-979-85	<pre>olode egp20g </pre> <pre><ferrite beal<="" pre=""></ferrite></pre>	Do			R629 R630 R631	1-202-727-00 1-216-490-11 1-249-412-11	METAL OXIDE	4.7M 39K 390	10% 5% 5%	1/2W 3W 1/4W	
FB601	1-410-396-41	FERRITE BEAD		R 0.45	UH	R632 R1602	1-249-401-11 1-202-842-11	CARBON	47 220K	5% 20%	1/4W 1/2W	
FB602 FB603 FB604 FB605	1-410-396-41 1-410-396-41	FERRITE BEAD FERRITE BEAD FERRITE BEAD	INDUCTO INDUCTO	R 0.45	UH UH	R1603	1-202-842-11	SOLID	220K	20%	1/2W	
FB606		FERRITE BEAD						<relay></relay>				FF F FFFFFF F FFF
FB607 FB608 FB609	1-410-397-21 1-410-397-21	FERRITE BEAD FERRITE BEAD FERRITE BEAD	INDUCTO INDUCTO	R 1.1U R 1.1U	H H	RY601	1-515-738-11		7D.			
FB610 FB611		FERRITE BEAD				T601	1.426.716.11	TRANSFORME		TED /I	ET)	
FB612 FB613	1-410-397-21	FERRITE BEAD FERRITE BEAD	INDUCTO	R 1.1U	H	T602 T603	1-426-716-11	TRANSFORMEI TRANSFORMEI TRANSFORMEI	R, LINE FII	TER (L	FT)	
		<ic></ic>						<thermistor< td=""><td>></td><td></td><td></td><td></td></thermistor<>	>			
IC601 IC601 IC602	8-749-925-03	SHEET, INSULA IC STR-M6524 IC STR-S3115	TING			THP601	1-808-059-31	THERMISTOR,	POSITIVE			
IC603 IC604		IC NJM78M05F	A			5 5 5 5 6		<test pin=""></test>				
IC605	8-759-231-58	IC TA7812S				TP1601	1-536-354-00	POST PIN				
		<coil></coil>				0 0 0 0		<varistor></varistor>				
L601 L1601 L1602 L2601	1-410-679-31 1-421-421-00	COIL, CHOKE 2 INDUCTOR 270 COIL, CHOKE COIL (WITH CO	UH			VDR602	1-809-942-71 1-809-942-71			****		
		<photo coup<="" td=""><td>LER></td><td></td><td></td><td></td><td></td><td></td><td>··· **********************************</td><td>· · · · · · · · · · · · · · · · · · ·</td><td></td><td>· · · · · ·</td></photo>	LER>						··· **********************************	· · · · · · · · · · · · · · · · · · ·		· · · · · ·
PH 601	8-749-923-50	PHOTO COUPL		rs								
		<transistor:< td=""><td></td><td>_</td><td></td><td>8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8</td><td></td><td></td><td></td><td></td><td></td><td></td></transistor:<>		_		8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8						
Q601	8-729-140-96	TRANSISTOR 2										



REF. NO.	PART NO. DESCRIPTION	R	EMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK	
		********** (PVM-14	M4U/E/A)	Q702 Q703 Q704	8-729-119-78	TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2	SC2785-H	FE		
	* A-1331-631-A C BOARD, (COMPLETE		Q705	8-729-200-17	TRANSISTOR 2	SA1091-0			
	7-682-949-01 SCREW +PSV	V 3X10	M2U/E/A)	Q706 Q710 Q711 Q712 Q713	8-729-200-17 8-729-200-17 8-729-200-17	TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2	SA1091-0 SA1091-0 SA1091-0			
C701	1-102-157-00 CERAMIC	560PF 10%	500V	Q713 Q714		TRANSISTOR 2				
C702 C703 C704 C705	1-102-157-00 CERAMIC 1-102-157-00 CERAMIC 1-102-121-00 CERAMIC 1-104-665-11 ELECT	560PF 10% 560PF 10% 0.0022MF 10% 100MF 20%	500V 500V 500V 50V 16V	Q715 Q716 Q717	8-729-119-78 8-729-119-78	TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2	SC2785-H SC2785-H	FE		
C706 C707	1-102-074-00 CERAMIC 1-162-116-00 CERAMIC	0.001MF 10% 680PF 10%	50V 2KV			<resistor></resistor>				
C708 C710 C711	1-136-601-11 FILM 1-101-880-00 CERAMIC 1-101-880-00 CERAMIC	0.01MF 5% 47PF 5% 47PF 5%	630V 50V 50V	R702 R704 R705 R706	1-247-903-00 1-215-405-00 1-215-405-00 1-215-405-00	METAL METAL	1M 220 220 220	5% 1% 1% 1%	1/4W 1/4W 1/4W 1/4W	
C712 C713 C714	1-101-880-00 CERAMIC 1-107-651-11 ELECT 1-102-976-00 CERAMIC	47PF 5% 4.7MF 20% 180PF 5%	50V 250V	R707	1-249-431-11	CARBON	15K	5%	1/4W	
C715 C716	1-102-976-00 CERAMIC 1-102-976-00 CERAMIC	180PF 5% 180PF 5%	50V 50V 50V	R708 R709 R710	1-249-431-11 1-249-431-11 1-215-391-00	CARBON METAL	15K 15K 56	5% 5% 1%	1/4W 1/4W 1/4W	
C717 C718	1-107-372-11 MYLAR 1-107-372-11 MYLAR	0.22MF 10% 0.22MF 10%	200V 200V	R711 R712	1-215-394-00 1-215-392-00		75 62	1% 1%	1/4W 1/4W	
C720 C734 C735	1-106-383-00 MYLAR 1-102-973-00 CERAMIC 1-102-816-00 CERAMIC	0.047MF 10% 100PF 5% 120PF 5%	200V 50V 50V	R715 R716 R717	1-202-818-00	METAL OXIDE SOLID	1K	20% 5% 20%	1/2W 3W F 1/2W	
C736 C740	1-102-816-00 CERAMIC 1-162-114-00 CERAMIC	120PF 5% 0.0047MF	50V 2KV	R718 R719	1-202-818-00	METAL OXIDE SOLID	8.2K 1K	5% 20%	3W F 1/2W	
	COMMEGNO		M4U/E/A)	R720 R722	1-202-838-00		8.2K 100K	5% 20% (1	3W F 1/2W 4M4U/E/A)	
CN701	CONNECTO *1-564-511-11 PLUG, CONN			R722	1-202-883-11		680K	20%	1/2W 4M2U/E/A)	ļ
	*1-573-964-11 PIN, CONNEC 1-695-915-11 TAB (CONTA 1-695-915-11 TAB (CONTA	CTOR (PC BOARD) 6P CT)		R723 R724 R725	1-202-838-00 1-202-842-11 1-202-719-00	SOLID	100K 220K	20% 20%	1/2W 1/2W	
	<diode></diode>			R725	1-202-883-11		1M 680K	20% (1 20%	1/2W 4M2U/E/A) 1/2W	J
D701	8-719-911-19 DIODE 1SS11	025		R731	1-247-815-91		220	5%	4M4U/E/A) 1/4W	ı
D702 D703 D704	8-719-911-19 DIODE 1SS11 8-719-911-19 DIODE 1SS11 8-719-911-19 DIODE 1SS11	9-25 9-25		R732 R733 R734	1-247-815-91 1-247-815-91 1-249-409-11	CARBON	220 220	5% 5%	1/4W 1/4W	
D705	8-719-911-19 DIODE 1SS11	9-25		R735 R736	1-249-409-11	CARBON	220 220	5% 5%	1/4W F 1/4W F	
D706 D707 D708	8-719-911-19 DIODE 1SS11 8-719-901-83 DIODE 1SS83 8-719-901-83 DIODE 1SS83	9-25		R737 R738	1-249-409-11 1-247-807-31 1-247-807-31	CARBON	220 100 100	5% 5% 5%	1/4W F 1/4W 1/4W	
D709 D713	8-719-901-83 DIODE 1SS83 8-719-901-83 DIODE 1SS83			R739 R740	1-247-807-31 1-249-429-11	CARBON CARBON	100 10K	5% 5%	1/4W 1/4W F	
D715	8-719-901-83 DIODE 1SS83		1	R741 R742	1-249-429-11 1-249-429-11	CARBON	10K 10K	5% 5%	1/4W F 1/4W F	
D716 D717	8-719-901-83 DIODE 1SS83 8-719-901-83 DIODE 1SS83			R744 R745	1-249-429-11 1-249-429-11		10K	5%	1/4W	
	<jack></jack>			R746 R747	1-215-879-11 1-247-725-11	METAL OXIDE	10K 47K 10K	5% 5% 5%	1/4W 1W F 1/4W F	
J701 J701	1-251-116-11 SOCKET, PIC 1-526-819-11 SOCKET, PIC	TURE TUBE (14M4U/E TURE TUBE (14M2U/E	E/A)	R748 R749	1-249-923-11		1K	5% 5%	1/4W F 2W F	
	<coil></coil>			R750 R751 R752	1-249-400-11 1-247-887-00 1-247-887-00	CARBON CARBON	39 220K 220K	5% 5% 5%	1/4W F 1/4W 1/4W	
L701 L705 L705	1-410-667-31 INDUCTOR 2: 1-412-532-11 INDUCTOR 3: 1-412-534-31 INDUCTOR 5:	OUH (14M2U/E/A)		R753	1-247-887-00		220K	5%	1/4W	
		(A MATOLIMEN)		RV707		<variable p="" re:<=""> DES ADI META</variable>		2016		
	<transisto< td=""><td>R></td><td></td><td>RV708</td><td></td><td>RES, ADJ, META RES, ADJ, META</td><td></td><td>(1,</td><td>4M2U/E/A)</td><td></td></transisto<>	R>		RV708		RES, ADJ, META RES, ADJ, META		(1,	4M2U/E/A)	
Q701	8-729-119-78 TRANSISTOR	2SC2785-HFE		44 7 7 00	1-200-019-11	alo, adj, meta	AL ULAZE		4M2U/E/A)	

The componants identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.



DEE NO	DADTINO	Processor			DE144 DV	PDE 110	D. D. D. D. L. D.				
REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
RV708 RV709		RES, ADJ, META RES, ADJ, META <spark gap=""></spark>			M4U/E/A)	\$2102 \$2103 \$2104 \$2105	1-570-101-41 1-570-101-41	SWITCH, KEY I SWITCH, KEY I SWITCH, KEY I	BOARD BOARD		
SG701	1-510-422-11	GAP, SPARK (14	AMATTÆ/A			S2106 S2107	1-570-969-11	SWITCH, KEY I SWITCH, KEY I	BOARD		
SG702 SG703 SG704	1-519-422-11 1-519-422-11	GAP, SPARK (14 GAP, SPARK (14 GAP, SPARK (14	4M4U/E/A) 4M4U/E/A)			S2107 S2108 S2109 S2110	1-570-101-41 1-570-101-41	SWITCH, KEY I SWITCH, KEY I SWITCH, KEY I	BOARD BOARD		
*****	*****	****	******	******	\$2111 \$2112 \$2113 \$2114	1-570-101-41 1-570-969-11	SWITCH, KEY I SWITCH, KEY I SWITCH, KEY I SWITCH, KEY I	BOARD BOARD			
	* A-1372-302-A	H BOARD, CO	MPLETE								
	* 4-348-208-00	HOLDER, LED		•		******	******	******	******	*****	*****
		<connector></connector>	•				* A-1388-193-A	J BOARD, CO!	MPLETE		
		PLUG, CONNEC						<connector:< td=""><td></td><td></td><td></td></connector:<>			
		<diode></diode>				CN608	* 1-695-561-11	PIN, CONNECT	OR (PC BO	ARD) 7F	>
D2102	8-719-920-05	DIODE SLP281C	2-50					<switch></switch>			
D2103 D2104	8-719-812-32	DIODE TLY123 DIODE 1SS133T				S601	∆ 1-692-921-11	SWITCH, PUSH	(A.C. POW	ER)	
		<resistor></resistor>									
R2101	1-249-419-11	CARBON	1.5K	5%	1/4W	******	*********	********	******	****	*****
R2107 R2136 R2137 R2138	1-249-430-11 1-249-414-11 1-249-414-11 1-249-414-11	CARBON CARBON	12K 560 560 560	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W		* A-1390-704-A	X BOARD, CO			
R2139	1-249-414-11		560	5%	1/4W			<connector:< td=""><td></td><td></td><td></td></connector:<>			
R2140 R2141 R2142	1-249-414-11 1-249-414-11 1-249-414-11	CARBON	560 560 560	5% 5% 5%	1/4W 1/4W 1/4W	CN108	*1-564-518-11	PLUG, CONNEC	TOR 3P		
R2143	1-249-414-11	CARBON	560	5%	1/4W			<diode></diode>			
R2144 R2145	1-249-414-11 1-249-414-11	CARBON	560 560	5% 5%	1/4W 1/4W	D001 D002	8-719-023-78	DIODE SEL3810 DIODE SEL3810	DLC05		
R2147 R2148 R2149	1-215-427-00 1-215-419-00 1-215-414-00	METAL	1.8K 820 510	1% 1% 1%	1/4W 1/4W 1/4W	D003 D004		DIODE SEL3810 DIODE SEL3810			
R2150	1-215-409-00		330	1%	1/4W						
R2151 R2152	1-215-407-00 1-215-404-00	METAL	270 200	1% 1%	1/4W 1/4W	*******		********		de nie nie nie nie nie nie	*****
R2153 R2154	1-215-401-11 1-215-399-00		150 120	1% 1%	1/4W 1/4W		* A-1390-705-A	S BOARD, CO	*****		
R2155 R2156	1-215-397-00 1-215-421-00		100 1K	1% 1%	1/4W 1/4W			<capacitor></capacitor>	(PV	M-14M2	2U/14M4U)
R2157 R2158	1-215-416-00 1-215-410-00	METAL	620 360	1% 1%	1/4W 1/4W	C805	1-102-978-00		220PF	5%	50V
R2159	1-215-405-00	METAL	220	1%	1/4W	C806 C807	1-136-165-00 1-130-477-00	FILM	0.1MF 0.0033MF	5%	50V 50V
R2160	1-215-421-00	METAL	1 K	1%	1/4W	C810 C811	1-136-165-00 1-136-165-00		0.1MF 0.1MF	5% 5%	50V 50V
		<variable re<="" td=""><td></td><td></td><td></td><td>C812 C813</td><td>1-136-495-11 1-124-261-00</td><td></td><td>0.068MF 10MF</td><td>5% 20%</td><td>50V 50V</td></variable>				C812 C813	1-136-49 5 -11 1-124-261-00		0.068MF 10MF	5% 20%	50V 50V
R V2101 R V2103	1-225-385-11	RES, VAR, CAR RES, VAR, CAR	BON 20K			C818	1-136-165-00		0.1MF	5%	50V
RV2105 RV2109 RV2113	1-225-385-11	RES, VAR, CAR RES, VAR, CAR RES, VAR, CAR	BON 20K					<connector></connector>	•		
RV2117		RES, VAR, CAR				CN801	* 1-573-896-11	SOCKET, CONN	ECTOR 12	P	
		-CWITCH-						<coil></coil>			
S2101	1-570-101-41	<switch> SWITCH, KEY B</switch>	OARD			L801	1-410-470-11	INDUCTOR 10U	н		



Les composants identifies par une trame et une marque Λ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ∆ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
		<resistor></resistor>				C2447	1-124-234-00	ELECT	22MF	20%	16V
R802	1-249-435-11	CAPRON	33K	5%	1/4W	C2448 C2449	1-124-234-00 1-124-234-00		22MF	20%	16V
R803	1-247-863-91	CARBON	22K	5%	1/4W	C2449	1-124-234-00	ELECT	22MF	20%	16V
R804 R805	1-215-454-00 1-215-461-00		24K 47K	1% 1%	1/4W 1/4W	C2450 C2451	1-124-234-00		22MF	20%	16V
R808	1-249-417-11		1K	5%	1/4W	C2452	1-124-589-11 1-124-589-11		47MF 47MF	20% 20%	16V 16V
R812	1-249-417-11	CARBON	1 K	5%	1/4W	C2454 C2461	1-126-163-11	ELECT CERAMIC CHIP	4.7MF	20%	25V 50V
R813	1-249-417-11	CARBON	1K	5%	1/4W						
R815 R816	1-247-843-11 1-249-418-11		3.3K 1.2K	5% 5%	1/4W 1/4W	C2462 C2463		CERAMIC CHIP CERAMIC CHIP			50V 50V
R817	1-249-418-11		1.2K	5%	1/4W	C2464	1-165-319-11	CERAMIC CHIP	0.1MF		50V
R818	1-249-418-11	CARBON	1.2K	5%	1/4W	C2465 C2466		CERAMIC CHIP			50V 50V
R819 R820	1-249-418-11		1.2K	5%	1/4W						
K02U	1-249-422-11	CARBON	2.7K	5%	1/4W	C2467 C2468		CERAMIC CHIP CERAMIC CHIP			50V 50V
						C2469 C2470	1-165-319-11	CERAMIC CHIP	0.1MF		50V
******	******	*****	******	*****	*******	C24/0	1-103-319-11	CERAMIC CHIP	U.IMIF		50V
	1-537-735-14	TERMINAL BOA	ARD ASSY	1/O(A)				<connector></connector>			
	1 007 100 14	******		*****	•						
				1	(Q BOARD)	CN306 CN307	1-564-526-11	PLUG, CONNEC PLUG, CONNEC	TOR 11P		
	2-990-241-02					CN308	1-564-519-11	PLUG, CONNEC			MANAGE
	3-178-213-21 7-685-135-19		10 X10 TYPE2	2 SLIT		CN2401 A	1-251-263-11 1-565-167-12	TERMINAL, (S)	(WITH SW) 4P	
										, 12	
		<capacitor></capacitor>				CN2403 CN2404	1-764-872-11	TERMINAL, S (V CONNECTOR, M	TULTI 20P		
C2401	1-163-111-00	CERAMIC CHIP	S6PE	5%	50V			•			
C2402	1-104-396-11	ELECT	10MF	20%	16V			<diode></diode>			
C2403 C2404	1-104-396-11 1-104-396-11		10MF 10MF	20% 20%	16V 16V	D2402	8-719-016-74	DIODE 1SS352			
C2405	1-124-589-11		47MF	20%	16V	D2404	8-719-800-76	DIODE 1SS226			
C2406	1-104-396-11	ELECT	10MF	20%	16V	D2405 D2406		DIODE 1SS226 DIODE 1SS226			
C2407 C2408	1-104-396-11 1-104-396-11		10MF 10MF	20% 20%	16V	D2407		DIODE 1SS226			
C2409	1-124-234-00	ELECT	22MF	20%	16V 16V	D2408	8-719-800-76	DIODE 1SS226			
C2410	1-163-033-91	CERAMIC CHIP	0.022MF		50V	D2409 D2410		DIODE 1SS226 DIODE 1SS226			
C2411	1-104-396-11		10MF	20%	16V	D2411	8-719-800-76	DIODE 1SS226			
C2412 C2413	1-104-396-11 1-163-117-00	CERAMIC CHIP	10MF 100PF	20% 5%	16V 50V	D2415	8-719-800-76	DIODE 1SS226			
C2414 C2415	1-126-301-11		1MF	20%	50V	D2416		DIODE 1SS226			
			U.IMIF		50V	D2417 D2418		DIODE 1SS226 DIODE 1SS226			
C2416 C2418	1-124-589-11	ELECT CERAMIC CHIP	47MF	20%	16V 50V	D2420 D2421		DIODE RD27SB- DIODE RD27SB-			
C2422	1-124-234-00	ELECT	22MF	20%	16V						
C2423 C2424	1-124-234-00 1-163-033-91	ELECT CERAMIC CHIP	22MF 0.022MF	20%	16V 50V	D2422 D2423		DIODE RD27SB- DIODE RD27SB-			
C2425				400			0 . 15 05 . 05	DIODE RDE/OB	••		
C2426	1-124-589-11 1-124-589-11	ELECT	47MF	20% 20%	16V 16V			<ic></ic>			
C2427 C2428	1-124-234-00	ELECT CERAMIC CHIP	22MF	20%	16V 50V	IC2401	9 750 500 71	IC XRU4021BF-F	20		
C2429	1-124-234-00		22MF	20%	16V	IC2402	8-759-509-71	IC XRU4021BF-F			
C2430	1-163-033-91	CERAMIC CHIP	0.022MF		50V	IC2403 IC2404		IC MM1113XFF IC MM1111XF			
C2431	1-124-234-00	ELECT	22MF	20%	16V	IC2405		IC MM1113XFF			
C2432 C2433	1-124-234-00 1-163-033-91	CERAMIC CHIP	22MF 0.022MF	20%	16V 50V						
C2434	1-124-463-00		0.1MF	20%	50V			<jack></jack>			
C2435	1-163-033-91	CERAMIC CHIP	0.022MF		50V	J2401	1-562-261-71	CONNECTOR, C	OAXIAL (1	BNC)	
C2436 C2437	1-124-234-00	ELECT CERAMIC CHIP	22MF	20%	16V 50V	J2402 J2403	1-766-738-11	BNC (WITH SW)		,	
C2438	1-124-234-00	ELECT	22MF	20%	16V	J2404	1-766-738-11	CONNECTOR, C BNC (WITH SW)			
C2439	1-124-234-00	ELECT	22MF	20%	16V	J2405	1-562-261-71	CONNECTOR, C	OAXIAL (1	BNC)	
C2440		CERAMIC CHIP		200	50V	J2406		BNC (WITH SW)			
C2441 C2442	1-124-234-00 1-124-234-00	ELECT	22MF 22MF	20% 20%	16V 16V	J2407 J2408		CONNECTOR, C BNC (WITH SW)		BNC)	
C2443 C2444	1-124-234-00 1-124-234-00		22MF 22MF	20% 20%	16V 16V	J2409 J2410	1-562-261-71	CONNECTOR, C	OAXIAL (I	BNC)	
				2070				BNC (WITH SW)			
C2445 C2446		CERAMIC CHIP CERAMIC CHIP			50V 50V	J2411 J2412	1-562-261-71	CONNECTOR, C BNC (WITH SW)	OAXIAL (I	BNC)	
-							- 100 100-11	(1111111111)			



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK
J2413 J2414 J2415	1-507-802-41	JACK, PIN (MOUNT TYPE) JACK, PIN (MOUNT TYPE) JACK, PIN (MOUNT TYPE)		R2417 R2418 R2419 R2420	1-216-089-91 1-216-073-00	METAL GLAZE 10K METAL GLAZE 47K METAL GLAZE 10K METAL GLAZE 47K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
J2416 J2417 J2418 J2419	1-507-802-41 1-507-802-41 1-507-802-41	JACK, PIN (MOUNT TYPE) JACK, PIN (MOUNT TYPE) JACK, PIN (MOUNT TYPE) JACK, PIN (MOUNT TYPE)		R2421 R2422 R2423	1-216-073-00 1-216-089-91 1-216-073-00	METAL GLAZE 10K METAL GLAZE 47K METAL GLAZE 10K	5% 5% 5%	1/10W 1/10W 1/10W
J2420	1-507-802-41	JACK, PIN (MOUNT TYPE) <chip conductor=""></chip>		R2424 R2425 R2426	1-216-073-00 1-214-775-00		5% 5% 1%	1/10W 1/10W 1/4W
JR1 JR4 JR5 JR7	1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP		R2427 R2428 R2429 R2430 R2431	1-216-105-91 1-216-025-91 1-216-115-00	METAL GLAZE 100K METAL GLAZE 220K METAL GLAZE 100 METAL GLAZE 560K METAL GLAZE 15K	5% 5% 5%	1/10W 1/10W 1/10W 1/10W
JR12 JR13	1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP		R2432 R2433	1-214-775-00	METAL 82K	5% 1%	1/10W 1/4W
JR14 JR15 JR16 JR17	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP		R2434 R2435 R2436	1-216-105-91 1-216-025-91 1-216-115-00	METAL GLAZE 100K METAL GLAZE 220K METAL GLAZE 100 METAL GLAZE 560K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
JR19 JR20 JR21 JR23	1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP		R2437 R2438 R2439 R2440 R2441	1-216-077-00 1-214-775-00 1-216-105-91	CONDUCTOR, CHIP METAL GLAZE 15K METAL 82K METAL GLAZE 220K METAL GLAZE 100K	5% 1% 5% 5%	1/10W 1/4W 1/10W 1/10W
JR30 JR34 JR35 JR40	1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP		R2442 R2443 R2444 R2446	1-216-025-91 1-216-115-00	METAL GLAZE 100 METAL GLAZE 560K METAL GLAZE 15K	5% 5% 5% 1%	1/10W 1/10W 1/10W 1/4W
JR41 JR43	1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP		R2447 R2448	1-216-105-91	METAL GLAZE 220K METAL GLAZE 100K	5% 5%	1/10W 1/10W
JR46 JR47 JR48 JR52 JR60	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP		R2449 R2450 R2451 R2452	1-216-025-91 1-216-115-00 1-216-077-00	METAL GLAZE 100 METAL GLAZE 560K METAL GLAZE 15K METAL GLAZE 47K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
J. 100	1-210-275-71	<transistor></transistor>		R2453 R2455 R2458	2-216-113-00	METAL GLAZE 10K METAL GLAZE 470K CONDUCTOR, CHIP	5% 5%	1/10W 1/10W
Q2401 Q2402	8-729-216-22	TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SA1162-G		R2463 R2465	1-216-085-00	METAL GLAZE 33K METAL GLAZE 10K	5% 5%	1/10W 1/10W
Q2403 Q2404 Q2405	8-729-216-22 8-729-216-22	TRANSISTOR 2SA1162-G TRANSISTOR 2SA1162-G TRANSISTOR 2SA1162-G		R2466 R2467 R2470 R2471	1-216-073-00 1-214-702-00	METAL GLAZE 10K METAL GLAZE 10K METAL 75 METAL GLAZE 68K	5% 5% 1% 5%	1/10W 1/10W 1/4W 1/10W
Q2408 Q2409 Q2410 Q2411 Q2412	8-729-120-28 8-729-120-28 8-729-120-28	TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SC1623-L5L6		R2472 R2473 R2474 R2475	1-216-037-00 1-216-049-91	METAL GLAZE 3.9K METAL GLAZE 330 METAL GLAZE 1K METAL GLAZE 56K	5% 5% 5%	1/10W 1/10W 1/10W 1/10W
Q2414 Q2415	8-729-120-28 8-729-120-28	TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SC1623-L5L6		R2476 R2477	1-214-702-00		5% 10% 5%	1/10W 1/4W 1/10W
Q2416 Q2417		TRANSISTOR 2SA1162-G TRANSISTOR 2SC1623-L5L6		R2478 R2479 R2480 R2481	1-216-027-00 1-216-049-91 1-216-093-00	METAL GLAZE 3.9K METAL GLAZE 120 METAL GLAZE 1K METAL GLAZE 68K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
P2 401	1 216 072 00	<resistor></resistor>	1/1037	R2482	1-214-702-00		1%	1/4W
R2401 R2402 R2404 R2405 R2406	1-216-043-91 1-216-089-91 1-216-073-00	METAL GLAZE 10K 5% METAL GLAZE 560 5% METAL GLAZE 47K 5% METAL GLAZE 10K 5% METAL GLAZE 47K 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R2483 R2484 R2485 R2486 R2487	1-216-027-00 1-216-063-91 1-216-049-91	METAL GLAZE 56K METAL GLAZE 120 METAL GLAZE 3.9K METAL GLAZE 1K METAL GLAZE 68K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R2407 R2408 R2409 R2410 R2411	1-216-089-91 1-216-073-00 1-216-089-91	METAL GLAZE 10K 5% METAL GLAZE 47K 5% METAL GLAZE 10K 5% METAL GLAZE 47K 5% METAL GLAZE 10K 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R2488 R2489 R2490 R2491 R2492	1-216-063-91 1-216-027-00	METAL 75 METAL GLAZE 56K METAL GLAZE 3.9K METAL GLAZE 120 METAL GLAZE 1K	1% 5% 5% 5% 5%	1/4W 1/10W 1/10W 1/10W 1/10W
R2412 R2413 R2414 R2415 R2416	1-216-073-00 1-216-089-91 1-216-073-00	METAL GLAZE 47K 5% METAL GLAZE 10K 5% METAL GLAZE 47K 5% METAL GLAZE 10K 5% METAL GLAZE 47K 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R2493 R2494 R2495 R2496 R2497	1-216-093-00 1-214-702-00 1-214-702-00 1-216-091-00	METAL GLAZE 68K METAL 75	5% 1% 1% 5% 5%	1/10W 1/4W 1/4W 1/10W 1/10W

PVM-14M2U/14M4U/14M2E PVM-14M4E/14M2A/14M4A



REF. NO. PART NO. DESCRIPTION REMARK R2498 1-216-037-00 METAL GLAZE 330 1/10W 1-216-049-91 METAL GLAZE 1K 5% R2499 1/10W R3400 1-216-093-00 METAL GLAZE 68K 1/10W 1-216-091-00 METAL GLAZE 56K R3402 5% 1/10W R3404 1-216-063-91 METAL GLAZE 3.9K 5% 1/10W 1/10W R3405 1-216-037-00 METAL GLAZE 330 R3406 1-216-049-91 METAL GLAZE 1K 1/10W R3408 1-216-093-00 METAL GLAZE 68K 5% 1/10W R3409 1-214-702-00 METAL 75 1% 1/4W 1-216-091-00 METAL GLAZE 56K 1/10W 5% R3410 5% 1/10W R3411 1-216-063-91 METAL GLAZE 3.9K 1-216-037-00 METAL GLAZE 330 5% R3412 R3413 1-216-073-00 METAL GLAZE 10K 5% 1/10W R3414 1-216-073-00 METAL GLAZE 10K 5% 1/10W 5% 1/10W R3416 1-216-049-91 METAL GLAZE 1K 1/10W R3417 1-216-093-00 METAL GLAZE 68K 1-214-702-00 METAL 75 1-216-037-00 METAL GLAZE 330 1-216-023-00 METAL GLAZE 82 R3418 1% 1/4W 5% 5% 5% R3419 R3420 1/10W 1/10W R3421 1-216-689-11 METAL GLAZE 39K 1/10W R3422 1-216-049-91 METAL GLAZE 1K 5% 1/10W 1-216-083-00 METAL GLAZE 27K 1-216-049-91 METAL GLAZE 1K 1-216-061-00 METAL GLAZE 3.3K 5% 5% R3423 R3424 1/10W 1/10W R3425 5% 1/10W R3426 1-216-099-00 METAL GLAZE 120 1-216-089-91 METAL GLAZE 47K 1-216-073-00 METAL GLAZE 10K 1-216-089-91 METAL GLAZE 47K 1-216-073-00 METAL GLAZE 10K 5% 1/10W R3427 5% 5% R3428 1/10W R3429 1/10W R3430 5% 1/10W R3431 1-216-089-91 METAL GLAZE 47K 1/10W R3432 1-216-073-00 METAL GLAZE 10K 1-216-045-91 METAL GLAZE 680 1-216-045-91 METAL GLAZE 680 5% 1/10W R3435 5% 1/10W 5% 5% R3436 1/10W R3437 1-216-045-91 METAL GLAZE 680 1/10W R3438 1-216-045-91 METAL GLAZE 680 5% 1/10W 1/10W R3439 1-216-045-91 METAL GLAZE 680 <SWITCH> S2401 1-570-598-11 SWITCH, DIP

Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark A are critical for safety.

Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK
		MISCELLANE	OUS
	∆ 1-223-417-11	RESISTOR AS	SY (HIGH-VOLTAGE) (14M4U/E/A)
	₫ 1-426-442-21	COIL, DEMAG	
			YOKE (14M4U/E/A)
		MAGNET,DISI	
	1-452-094-00	MAGNET,ROT	ATABLE DISK; 15mmø
	1-544-063-12	CDEAVED	
		FUSE (H.B.C.)	A A PIKOV
			WER (14M2E/A, 14M4E/A)
		CORD, CONNI	
			WER (14M2U/14M4U)
			YOKE (14M2U/E/A)
	W 0-130-333-03	PICTURE TUB	E 14MT1 (L-BVM, PVM) (14M4E/A)
	▲8-738-335-05	PICTURE TUB	E 14MT3(L-BVM, PVM) (14M4U)
	Д 8-738-342-05	PICTURE TUB	E 14MG(DARK) (14M2Ú/E/A)
******	********	*******	********
1 4 5 5 6 6			NG MATERIALS
	2 170 070 01	HOLDED (D)	DE LIC
		HOLDER (B), I MANUAL, INS	
	3-039-003-12	MANOAL, IN	(14M2E/14M4E only)
	3-859-663-22	MANUAL, INS	TRUCTION
	4-044-040-03	LABEL, TALL	Y
	* 4-058-820-01	INDIVIDUAL	CARTON
	* 4-381-155-01	BAG, PROTEC	TION
			•
1			
1			